

Rogue National Wild and Scenic River: Hellgate Recreation Area

Proposed Recreation Area Management Plan and Final Environmental Impact Statement



As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interest of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U. S. administration.

BLM/OR/WA/PL-03/008-1792

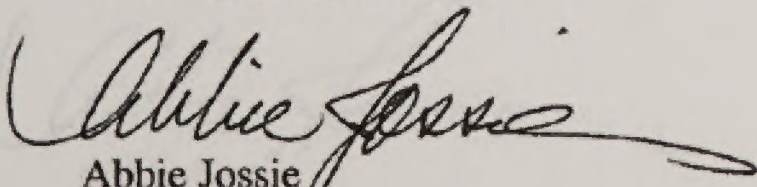
Hellgate Recreation Area

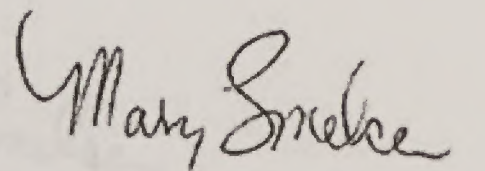
Proposed Recreation Area Management Plan and Final Environmental Impact Statement

March 2003

Prepared by:

United States Department of the Interior
Bureau of Land Management
Medford District Office


Abbie Jossie
Field Manager


Mary Smelcer
Acting District Manager



United States Department of the Interior



BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT OFFICE

3040 Biddle Road
Medford, Oregon 97504
email address: or110mb@or.blm.gov

IN REPLY REFER TO:
8351(11780)
Hellgate/RAMP/FEIS

Dear Friend of the Rogue River:

We are pleased to release the Proposed Hellgate Recreation Area Management Plan (RAMP)/Final Environmental Impact Statement (FEIS). The plan covers the Rogue National Wild and Scenic River Hellgate Recreation Area, which is the 27-mile stretch from the confluence of the Applegate River to Grave Creek.

Based on public comments received and internal review of the Hellgate RAMP/Draft EIS (published in November 2000), changes, corrections, and clarifications were made in the Hellgate RAMP/Final EIS. This plan analyzes alternatives, including BLM's Proposed Action, for long-term management of this popular recreation area.

Release of this FEIS initiates a 30-day availability period; after which, the Record of Decision (ROD) and the Hellgate Recreation Area Management Plan will be prepared and published. Any comments received, including names and street addresses of respondents will be available for public review at the Medford District Office, 3040 Biddle Road, Medford, Oregon. If you wish to withhold your name or addresses from public review or from disclosure under the Freedom of Information Act, you must site this prominently at the beginning of your comments. Distribution of the ROD/Hellgate Recreation Area Management Plan is expected to occur in 2003.

We want to acknowledge the planning team for their hard work, and thank the local government and interested friends of the Rogue National Wild and Scenic River who provided comments on the Draft EIS during the public review period.

Sincerely,

Abbie Jossie
Field Manager
Grants Pass Resource Area

Sincerely,

Mary Smelcer
Acting District Manager
Medford District

**Rogue National Wild and Scenic River:
Hellgate Recreation Area Proposed Recreation Area Management Plan/
Final Environmental Impact Statement**

1. **Responsible Agency:** United States Department of the Interior, Bureau of Land Management
2. Draft ☐ **Final** ☒
3. **Administrative Action** ☒ Legislative Action ☐
4. **Abstract:** The Hellgate Recreation Area Proposed Recreation Area Management Plan/Final Environmental Impact Statement (RAMP/FEIS) considers five alternatives for managing various resources and programs along the 27-mile stretch of the Rogue River System. In 1968, the United States Congress designated the U.S. Forest Service and the BLM as the lead agencies for managing the land and water within the identified National Wild and Scenic Rogue River corridor (84 miles from its confluence with the Applegate River downstream to the Lobster Creek Bridge). The portion of the river from the mouth of the Applegate River downstream to Marial, a distance of approximately 47 miles, is administered by the BLM, Medford District Office. The lower 37 miles are located within the boundaries of the Siskiyou National Forest and are administered by the U.S. Forest Service.

The Rogue River was one of eight rivers identified as part of the National Wild and Scenic Rivers System when the Wild and Scenic Rivers Act was passed in 1968. Designated rivers are classified as wild, scenic, or recreational. The original eight rivers were "instant designation" rivers; they were not study rivers. The 27-mile stretch of the Rogue National Wild and Scenic River Hellgate Recreation Area from the confluence of the Applegate River to Grave Creek was classified as a recreational river.

All of the recommended planning issues share one topic: the growth of different types of recreation use on the river. How much recreation use and how many visitors can and should the river support? Major planning issues revolve around motorized and nonmotorized boating, nonmotorized boat angling, user fees, camping, trails, day-use areas, public access, and visitor services. The five alternatives, which includes the Proposed Action (Alternative E) for management of the Rogue River Hellgate Recreation Area have been developed and analyzed in accordance with state and federal requirements. The alternatives were designed to protect and enhance the outstandingly remarkable values, which Congress identified for the designated recreational river.

A draft of this document was released for a 90-day public review and comment period on November 24, 2000. Differences from the Hellgate RAMP/Draft EIS or points of clarification or management direction have been incorporated into the RAMP/FEIS in response to both public comments and staff review of the RAMP/DEIS.

Release of this Final EIS, begins a 30-day availability period.

5. **Date Hellgate Recreation Area Management Plan/Final Environmental Impact Statement made available to Environmental Protection Agency and public March 21, 2003.**

For further information contact:

Chris Dent, Rogue River Manager (541) 618-2275
Cori Cooper, Planning Team Leader (541) 618-2428
Bureau of Land Management
Medford District Office
3040 Biddle Road
Medford, Oregon 97504

User's Guide

The Hellgate Recreation Area Proposed Recreation Area Management Plan/Final Environmental Impact Statement (RAMP/FEIS) is divided into seven sections: Summary, Chapter 1 (Introduction), Chapter 2 (Alternatives), Chapter 3 (Affected Environment), Chapter 4 (Environmental Consequences), Chapter 5 (Consultation and Coordination), and Appendices. The major sections of the RAMP/FEIS are explained below.

Chapter 1

This chapter contains introductory material to the RAMP/FEIS. It includes a description of the planning area and the purpose and need for preparing the RAMP/FEIS. It identifies the issues or concerns addressed in the RAMP/EIS process. Included is a discussion of the RAMP's relationship to BLM policies, programs, and other plans.

Chapter 2

This chapter describes the range of alternatives including the No Action Alternative (Alternative B) and the BLM's Proposed Action (Alternative E). The range of alternatives lists different ways the issues could be resolved. The alternatives present different approaches to meeting the underlying needs identified in Chapter 1.

Chapter 3

This chapter describes the social, physical, biological, and socioeconomic characteristics of BLM-administered land as they exist in the planning area. Resources that could be affected by BLM management alternatives are emphasized.

Chapter 4

In this chapter, the environmental consequences (effects) of implementing the alternatives (described in Chapter 2) are defined and compared to the existing conditions (described in Chapter 3). This chapter is organized by resource elements and issues. Effects are described by alternative within each individual resource, as appropriate. Direct, indirect, and cumulative effects are all considered to the extent identifiable in each analysis.

Chapter 5

This chapter describes agencies and organizations BLM has worked with during the preparation of the RAMP/FEIS. It summarizes public involvement and includes the List of Preparers. Responses to the comments received during the review period for the RAMP/Draft EIS are included in this chapter.

Tables, Maps, and Figures

Tables, maps, and figures are located after each chapter.

Acronyms

ACS – Aquatic Conservation Strategy
ADA – Americans with Disabilities Act of 1990
ADAAG – Americans with Disabilities Act Accessibility Guidelines
ARPA – Archaeological Resources Protection Act of 1979
BLM – Bureau of Land Management
BMP – Best Management Practices
CFR – Code of Federal Regulations
dBA – Decibels “A”scale
DEIS – Draft Environmental Impact Statement
EA – Environmental Assessment
EIS – Environmental Impact Statement
EPA – Environmental Protection Agency
ESA – Endangered Species Act
FEIS – Final Environmental Impact Statement
FSEIS – Final Supplemental Environmental Impact Statement
FR – Federal Register
GIS – Geographic Information System
HRA – Hellgate Recreation Area
MDO – Medford District Office
MOA – Memorandum of Agreement
MTB – Motorized Tour Boat
NEPA – National Environmental Policy Act of 1969
NMFS – National Marine Fisheries Service
OAR – Oregon Administrative Rules
ODEQ – Oregon Department of Environmental Quality
ODF – Oregon Department of Forestry
ODFW – Oregon Department of Fish and Wildlife
ODSL – Oregon Division of State Lands
ORS – Oregon Revised Statutes
OHV – Off-Highway Vehicle
OPRD – Oregon Parks and Recreation Department
ORV – Outstandingly Remarkable Value
OSMB – Oregon State Marine Board
OSMP – Oregon Smoke Management Program
RAMP – Recreation Area Management Plan
RM – River Mile
RMP – Resource Management Plan
ROD – Record of Decision
ROS – Recreation Opportunity Spectrum
SIP – State Implementation Plan
SRP – Special Recreation Permit
UFAS – Uniform Federal Accessibility Standards
USDA – United States Department of Agriculture
USDI – United States Department of the Interior
USFS – United States Forest Service
USFWS – United States Fish and Wildlife Service
VC – Visitor Center
VRM – Visual Resource Management
WSRA – Wild and Scenic River Act of 1968

Chapter 1	1.1
Chapter 2	2.1
Chapter 3	3.1
Chapter 4	4.1
Chapter 5	5.1
Chapter 6	6.1
Chapter 7	7.1
Chapter 8	8.1
Chapter 9	9.1
Chapter 10	10.1
Chapter 11	11.1
Chapter 12	12.1
Chapter 13	13.1
Chapter 14	14.1
Chapter 15	15.1
Chapter 16	16.1
Chapter 17	17.1
Chapter 18	18.1
Chapter 19	19.1
Chapter 20	20.1
Chapter 21	21.1
Chapter 22	22.1
Chapter 23	23.1
Chapter 24	24.1
Chapter 25	25.1
Chapter 26	26.1
Chapter 27	27.1
Chapter 28	28.1
Chapter 29	29.1
Chapter 30	30.1
Chapter 31	31.1
Chapter 32	32.1
Chapter 33	33.1
Chapter 34	34.1
Chapter 35	35.1
Chapter 36	36.1
Chapter 37	37.1
Chapter 38	38.1
Chapter 39	39.1
Chapter 40	40.1
Chapter 41	41.1
Chapter 42	42.1
Chapter 43	43.1
Chapter 44	44.1
Chapter 45	45.1
Chapter 46	46.1
Chapter 47	47.1
Chapter 48	48.1
Chapter 49	49.1
Chapter 50	50.1
Chapter 51	51.1
Chapter 52	52.1
Chapter 53	53.1
Chapter 54	54.1
Chapter 55	55.1
Chapter 56	56.1
Chapter 57	57.1
Chapter 58	58.1
Chapter 59	59.1
Chapter 60	60.1
Chapter 61	61.1
Chapter 62	62.1
Chapter 63	63.1
Chapter 64	64.1
Chapter 65	65.1
Chapter 66	66.1
Chapter 67	67.1
Chapter 68	68.1
Chapter 69	69.1
Chapter 70	70.1
Chapter 71	71.1
Chapter 72	72.1
Chapter 73	73.1
Chapter 74	74.1
Chapter 75	75.1
Chapter 76	76.1
Chapter 77	77.1
Chapter 78	78.1
Chapter 79	79.1
Chapter 80	80.1
Chapter 81	81.1
Chapter 82	82.1
Chapter 83	83.1
Chapter 84	84.1
Chapter 85	85.1
Chapter 86	86.1
Chapter 87	87.1
Chapter 88	88.1
Chapter 89	89.1
Chapter 90	90.1
Chapter 91	91.1
Chapter 92	92.1
Chapter 93	93.1
Chapter 94	94.1
Chapter 95	95.1
Chapter 96	96.1
Chapter 97	97.1
Chapter 98	98.1
Chapter 99	99.1
Chapter 100	100.1

Table of Contents

Executive Summary	i
Summary of Changes Between the Draft and Final RAMP/EIS	iii
Introduction	vii
The Planning Area	vii
Planning Issues	vii
Range of Planning Alternatives	ix
Rogue River Studies	xi
Tables	xiii
Chapter 1 – Introduction	1
Summary of Changes	3
Introduction	3
The Planning Area	3
Purpose and Need	4
Relationship to Legislation, BLM Policies, Plans, and Programs	4
Relationship to Other Policies, Plans, and Programs	8
Management Goals, Guidelines, and Standards for the Hellgate Recreation Area	12
Decisions to be Made	13
Monitoring	16
Analysis Files	16
Table, Map, and Figure	17
Chapter 2 – Alternatives	1
Summary of Changes	3
Introduction	4
Planning Issues	4
Motorized Boating	5
Nonmotorized Floating	5
Nonmotorized Boat Angling	5
User Fees for All Users	5
Recreational Opportunities	6
Issues Common to All Alternatives	7
Alternative Development Process	8
Alternatives Analyzed in Detail	9
Alternative A: Fewer Watercraft and Less Visitor Use	9
Alternative B - No Action or Current Management	16
Alternative C - Angler and Floater Enhancement/More Watercraft and Visitor Use	23
Alternative D - Maximum Watercraft and Visitor Use	31
Alternative E - Proposed Action	39
Alternatives Considered but Eliminated From Detailed Study	47
Oregon Guides and Packers	48
Oregon Natural Resources Council	49
Shan Creek/Galice Citizen Advisory Committee	49
Trout Unlimited	52
Tables, Maps, and Figures	55
Chapter 3 – Affected Environment	1
Summary of Changes	3
Introduction	4
The River's Physical Environment	4
Outstandingly Remarkable Values	5
Climate	5

Table of Contents

Air Resources	5
Fire	7
Wildland Fire Management	9
Soils	10
Water Resources	11
Riparian Areas, Wetlands, and Flood Plains	13
Botanical Resources	15
Fisheries	18
Wildlife	22
Visual Resources	27
Motorized Boaters	28
Commercial Motorized Tour Boats	28
Commercial Motorized Angling	32
Private Motorized Boats	32
Nonmotorized Floaters	32
Boat Anglers	35
Bank Anglers	37
Recreational Opportunities	39
Camping	39
Day-Use	41
Recreational Mining	43
Public Access	43
Fees	44
Visitor Services	45
Recreation Opportunity Spectrum	45
Boating Safety	45
Visitor Use	47
Law Enforcement/Emergency Services	49
Guided and Outfitter Services	50
Landowners	50
Sound	52
Transportation	54
Socioeconomics	55
Environmental Justice	56
Management Costs	56
Gross Revenue	56
Tables, Maps, and Figures	59
Chapter 4 – Environmental Consequences	1
Summary of Changes	3
Introduction	3
Types of Effects	3
Summary of Effects on the Outstandingly Remarkable Values	3
Introduction	3
Effects on Air Resources	6
Effects on Fire Risk	8
Effects on Soils	10
Effects on Water	12
Effects on Riparian Areas, Wetlands, and Flood Plains	14
Effects on Botanical Resources	17
Effects on Fisheries	20
Effects on Wildlife	23
Effects on Motorized Boaters	31
Private Motorized Boaters	31
Commercial Motorized Anglers	34

Commercial Motorized Tour Boat Passengers	37
Effects on Special Boating Event Participants and Spectators	39
Effects on Nonmotorized Floaters	40
Effects on Boat Anglers	43
Effects on Bank Anglers	47
Effects on Campers and Day-Use Visitors	50
Effects on Recreational Mining	54
Effects on Trail Users	58
Effects on Visitor Services	60
Effects on Boating Safety	61
Effects on Visitor Use	64
Effects on Law Enforcement and Emergency Services	64
Effects on Outfitter Services	68
Effects on Landowners	71
Effects on Sound	74
Effects on Transportation	75
Effects on Socioeconomics	76
Effects on Environmental Justice	78
Effects on Management Costs	79
Effects on Gross Revenues	84
Critical Elements of the Human Environment	86
Unavoidable, Irretrievable, and Irreversible Effects	87
Tables	89
Chapter 5 – Consultation and Coordination	1
Summary of Changes	3
Introduction	3
List of Preparers	3
List of Agencies and Organizations Contacted	8
Federal Agencies	8
State of Oregon Agencies	8
Local Government and other Governmental Bodies	8
Organizations	9
Businesses	9
Public Involvement	10
Scoping Processes	10
Public Involvement Following Publication of the RAMP/DEIS	13
BLM Public Outreach	15
Comments and Responses	20
Purpose and Need	20
Coordination with Other Agencies	20
Range of Alternatives	20
NEPA Requirements	20
Affected Environment	22
Environmental Consequences	22
Monitoring Plan	24
Outstandingly Remarkable Values	24
Use Limits	26
Air Resources	27
Fire	28
Soils	29
Water	31
Riparian Areas, Wetlands, and Flood Plains	32
Fisheries	32
Wildlife	42

Table of Contents

Botany	45
Scenery	45
All Watercraft Use	45
Motorized Boating	46
Commercial Motorized Boat Angling	46
Commercial Motorized Tour Boating	46
Special Boating Events	51
Nonmotorized Floating	52
Nonmotorized Boat Angling	52
Bank Angling	53
Boater Fees and Permits and User Fees	53
Recreation Opportunities	54
Recreation Opportunity Spectrum	55
Recreational Mining	55
Camping	57
Trails	57
Day-use Areas and Public Access	58
Visitor Services	58
Boating Safety	61
Visitor Use	61
Law Enforcement and Emergency Services	62
Outfitter Services	62
Landowners	63
Sound	63
Transportation	64
Socioeconomics	64
Environmental Justice	66
Management Costs	66
Gross Revenues	66
Comment Letters from Federal, State, and Local Government	69
Bibliography	1
Glossary	1
Appendices	1
Appendix A – Federal Register 1972	3
Appendix B – Management Guidelines and Standards for the Hellgate Recreation Area	17
Appendix C – County Zoning	37
Appendix D – Monitoring	45
Appendix E – Wild and Scenic Rivers Act of 1968	57

Executive Summary

Based on public comments received and staff review of the Draft EIS, the following corrections and additions have been made to the Draft EIS. The changes are presented in the following of each chapter. The following list summarizes the changes to the Draft EIS between the Draft and Final.

General Changes

- Minor changes have been made to the Draft EIS to correct errors and improve clarity.
- Where appropriate, Chapter 2.3 has been updated and expanded.
- The "All Mineral Rights" section has been removed from the Draft EIS. This category is an all inclusive category of mineral rights that is applied to all types of mineral use.
- References that have been removed from the Draft EIS have been removed from the Draft EIS. The "All Mineral Rights" section has been removed from the Draft EIS. The "All Mineral Rights" section has been removed from the Draft EIS.
- The Joint Land Use Planning Process (JLUPP) has been removed from the Draft EIS. The JLUPP has been removed from the Draft EIS. The JLUPP has been removed from the Draft EIS.
- There has been a change in the way that the Draft EIS is organized. The Draft EIS is now organized into chapters and sections. The Draft EIS is now organized into chapters and sections.
- The "All Mineral Rights" section has been removed from the Draft EIS. The "All Mineral Rights" section has been removed from the Draft EIS. The "All Mineral Rights" section has been removed from the Draft EIS.

Chapter 1

- The "Purpose and Need" section has been updated to reflect the changes in the Draft EIS. The "Purpose and Need" section has been updated to reflect the changes in the Draft EIS.
- The "Planning Area" section has been updated to reflect the changes in the Draft EIS. The "Planning Area" section has been updated to reflect the changes in the Draft EIS.
- The "Opportunities and Constraints" section has been updated to reflect the changes in the Draft EIS. The "Opportunities and Constraints" section has been updated to reflect the changes in the Draft EIS.
- The "Mitigation and Avoidance" section has been updated to reflect the changes in the Draft EIS. The "Mitigation and Avoidance" section has been updated to reflect the changes in the Draft EIS.
- The 1977 Range National Monument and Range National Monument have been removed from the Draft EIS. The 1977 Range National Monument and Range National Monument have been removed from the Draft EIS.
- The "Range National Monument" section has been removed from the Draft EIS. The "Range National Monument" section has been removed from the Draft EIS.
- The "Range National Monument" section has been removed from the Draft EIS. The "Range National Monument" section has been removed from the Draft EIS.

Summary of Changes Between the Draft and Final RAMP/EIS

Based on public comments received and staff review of the Hellgate RAMP/DEIS, changes, corrections, and clarifications were made in the Final EIS. The key changes are identified at the beginning of each chapter. The following lists all changes in the Hellgate RAMP/FEIS between the Draft and Final.

General Changes

Minor changes have been made to the RAMP/FEIS to maintain accuracy and consistency.

Where appropriate, Chapters 2, 3, and 4 have been updated and expanded.

The “All Motorized Boating” sections have been removed from the document. This category is an all inclusive category of use that cannot be applied to all types of motorized use.

Recreation sites have been removed from duplicate categories and have been listed in the primary use category. The word “only” has been added to primitive and developed day-use sites to eliminate duplication in site lists for all alternatives.

The Josephine County Parks within the Hellgate Recreation Area have been included on camp site, day-use, and boat ramp lists to show the full range of recreation sites. Trails administered by Josephine County Parks have also been included.

Taylor Bar has been removed from the text and maps. It is located on private property.

“Off-Highway Vehicle Trails” has been removed from the RAMP/FEIS. Public use of trail systems within the recreation section, existing or proposed, will be restricted to hikers only (USDI 1972, Transportation - Entire Area) (USDI 1995).

Chapter 1

The “Purpose and Need” section has been expanded to clarify why a plan is needed for the Hellgate Recreation Area.

The “Planning Area” section has been expanded to describe the two river reaches, the Applegate Reach and the Dunn Reach.

The “Outstandingly Remarkable Values” section has been expanded to include legislative intent.

The “Management Goals and Standards” section has been expanded to reflect the goals that describe a desired condition to be achieved and program management standards, which direct what will and will not occur to achieve the desired goals.

The *1972 Rogue National Wild and Scenic River, Oregon: Notice of Revised Development and Management Plan* and the *1978 Rogue National Wild and Scenic River Activity Plan for the Hellgate Recreation Section* have been added to the “Relationship to Legislation, BLM Policies, Plans, and Programs” section. They were inadvertently left out of the DEIS.

The Josephine County Parks Department has been added to the “Relationship to Other Policies, Plans, and Programs” section. They are a major contributor of recreational opportunities in the

Hellgate Recreation Area.

The Oregon Department of Environmental Quality and Oregon Department of Forestry have been added to the “Relationship to Other Policies, Plans, and Programs” section.

Chapter 2

“Issues Common to All Alternatives” section has been added.

One primitive day-use only site (Bailey Creek) has been added to the Proposed Action. It was inadvertently left out of the DEIS.

The number of commercial motorized angling permits has been corrected from one permit to three in Alternative B and the Proposed Action.

The season of use for commercial motorized angling in Alternative B has been corrected from year-round to May 1 through September 30.

The season of use for commercial motorized angling in the Proposed Action has been changed in both reaches to reflect the different management emphases in the Applegate and Dunn reaches. The season of use in the Applegate Reach is December 1 through September 30; the objective is to protect active adult fall chinook spawning behavior, redds, and sac-fry. The season of use in the Dunn Reach is September 1 through May 31; the objective is to reduce boating conflict when the high nonmotorized boat use occurs in June through August.

The “Fall Chinook Spawning Areas” listed in the RAMP/DEIS Alternative C has been added to the Proposed Action.

The “Facilities Location” section has been moved to Chapter 2, “Issues Common to All Alternatives” and renamed “Visitor Center Location.”

The word “new” has been added to the primitive camp area category in all alternatives to show the sites that have been added or deleted by alternative.

Flanagan Slough has been removed from the “Watchable Wildlife” list in the Proposed Action and has been added to the “Primitive Day-Use Only” section to protect wildlife habitat and the river environment.

The Josephine County Park sites within the Hellgate Recreation Area have been included on camp site, day-use, and boat ramp lists to show the full range of recreation sites. Trails administered by Josephine County Parks have also been included.

Recreation sites have been removed from duplicate categories and have been listed in the primary use category. The word “only” has been added to primitive and developed day-use sites to eliminate duplication in site lists for all alternatives.

“Limited Off-Highway Vehicle Use Areas” has been eliminated because the intent of these areas was not for all off-highway vehicles, but for vehicles off designated roads in certain areas for river access. The areas listed in the RAMP/DEIS under “Limited Off-Highway Vehicle Use Areas” are now listed under “Vehicle Access on Gravel Bars”. Vehicles are prohibited off of existing roads open to such use, except when parking on gravel bars at five locations: Whitehorse, Griffin Lane Complex, Rocky Bar, Rand, and Argo. The prohibition is pursuant to 43 CFR 8351.2-1, *Federal Register* Vol. 57, No. 110, 1992, 24271-24272.

The "Prohibition-of-Firearm-Discharge Areas" section has been changed to "Firearm Discharge Regulations" for clarity. Under the Proposed Action, the DEIS season of use of June 1 to September 30 for prohibition of firearm discharge has been changed to reflect 43 CFR 8351.2-1, *Federal Register* Vol. 57, No. 110, 1992, 24271-24272.

The construction of a new visitor center as addressed in the RAMP/DEIS Preferred Alternative will not be analyzed in this document.

The term "Use Limits" has replaced the term "Carrying Capacity."

"Special Motorized Boating Events" has been changed to "Special Boating Events" to include the possibility that a special event request could include nonmotorized watercraft. The "Permitted Events" section includes the "New Events" section from the RAMP/DEIS.

The "Vehicle Access Regulated" section of the RAMP/DEIS has been combined with the "User Fees" section.

"Trails" has been moved from Recreational Opportunities to the "Public Access" section.

Chapter 3

Where possible, data has been updated throughout the chapter using the most current information.

The "Fire" section has been expanded to provide the most current information. Power line inspections have been removed; they are no longer conducted by ODF. The "Wildland Fire Management" section has been added.

A reference to the Josephine County Soil Survey has been added to the "Soils" section. Public comments indicated an interest in additional information on soils found in the area.

The Clean Water Act information has been updated in the "Water Quality" section to reflect current policy.

The "Water Quantity" section has been updated to include recent water events.

An explanation of stream regulation necessary to maintain critical anadromous fish runs for the summer of 2001 was added.

"Class A" scenery has been defined.

The "Visitation Patterns" section has been updated to include user numbers gathered in August 2001.

The "Commercial Motorized Angling" section has been added to Chapter 3. It was inadvertently left out of the document.

The "Scenery" section has been renamed "Visual Resources." Visual Resource Management has been added to the "Visual Resources" section; "Scenery" is a subsection.

The "Recreational Opportunities" section has been expanded to be consistent with Chapter 2.

The "Visitor Services" section has been rewritten to expand interpretive services in response to public comments. The history of Rand was removed; it does not reflect current conditions.

The "Fees" section has been updated to reflect the current commercial permit fees.

Executive Summary

The Mt. Reuben Road number (34-8-01) has been added to Table 3-17.

Appendix F, *Botanical Resources Background Paper*, of the RAMP/DEIS has been removed from this document. "Botanical Resources" has been added to Chapter 3 to provide a description of the vegetative characteristics as they exist in the planning area.

Appendix E, "Recreation Opportunity Spectrum", of the RAMP/DEIS has been removed from the document. It has been added to Chapter 3 to reflect the current condition. It was not used in the formulation of the alternatives.

The number of commercial motorized angling permits has been corrected from one permit to three permits.

An error was corrected in Visitation Patterns in the "Motorized Boaters" section regarding average number of people per motorized boat. The RAMP/DEIS stated "3 people"; it should have read "44 people."

"Recreational Mining" has been added to Recreational Opportunities. Recreational mining was addressed in the RAMP/DEIS Appendix C. Public comments indicated that it should be recognized as a recreational opportunity.

The commercial outfitter fee collection procedure has been removed from "Guided and Outfitter Services" and has been added to the "Gross Revenue" section.

"Limited Off-Highway Vehicle Use Areas" has been eliminated because the intent of these areas was not for all off-highway vehicles, but for vehicles off designated roads in certain areas for river access. The areas listed in the RAMP/DEIS under "Limited Off-Highway Vehicle Use Areas" are now listed under "Vehicle Access on Gravel Bars". Vehicles are prohibited off of existing roads open to such use, except when parking on gravel bars at five locations: Whitehorse, Griffin Lane Complex, Rocky Bar, Rand, and Argo. The prohibition is pursuant to 43 CFR 8351-2-1, *Federal Register* Vol. 57, No. 110, 24271-24272.

Chapter 4

This chapter has been rewritten to expand the discussion of environmental effects that would occur by implementing the alternatives described in Chapter 2 and are compared to the existing conditions in Chapter 3.

Chapter 5

The "List of Preparers" section has been updated.

The "List of Agencies and Organizations Contacted" section has been updated.

The "Public Involvement Following Publication of the RAMP/DEIS" section has been added.

The "BLM Public Outreach" section has been updated to include January 1999 to January 2002.

The "Comments and Responses" section has been added.

Introduction

The Summary provides a brief overview of the issues, alternatives, and impacts associated with implementing any of the alternatives. For comparative purposes, see Table S-1 for a summary of issues by alternatives, Table S-2 for a summary of environmental consequences, and Table S-3 for the rationale for the Proposed Action.

The Planning Area

The Hellgate Recreation Area, also referred to as the planning area or HRA, is located within Josephine County, Oregon and covers approximately 8,000 acres in southwestern Oregon (see Map 1-1). Approximately 70 percent (5,500 acres) is managed by the BLM Medford District Office (see Table 1-1).

The Hellgate Recreation Area, the first 27 miles of the Rogue National Wild and Scenic River, is classified as a recreational river area (see Figure 1-1). A recreational river is defined by Congress as a river that is readily accessible by road or railroad, may have some development on its shoreline, and may have been impounded or diverted in the past. Management of this recreational river area will give primary emphasis to protecting the Outstandingly Remarkable Values, while providing a diversity of river-related recreational opportunities in a developed setting.

The Hellgate Recreation Area is divided into two reaches, the Applegate Reach and the Dunn Reach (see Map 1-1). The Applegate Reach begins at the confluence of the Applegate River and ends at Hog Creek. This reach is used primarily by motorized tour boaters and boat and bank anglers. The Dunn Reach begins at Hog Creek and ends at Grave Creek. The Dunn Reach is primarily used for white water rafting; though a small amount of power boat use occurs there.

Planning Issues

Planning issues revolve around the growing demand for recreational use on the river and the need to protect the natural and cultural resources (see Figures 2-1 and 2-2).

Some of the primary issues include:

- Conflicts among recreational users, including motorized and nonmotorized boaters, motorized boaters and anglers, and nonmotorized floaters and anglers. Most conflicts are related to safety, noise, encounters, wakes from motorized boats, and competition for use areas.
- Conflicts between recreational users and private landowners concerning noise, encounters, and trespass.
- Concerns about the potential impacts to fish species and possible bank erosion from motorized boats and other uses.
- Demand for improved or additional recreation facilities, such as visitor centers, parking areas, fishing access, boat launch sites, campsites, and day-use sites.
- Demand for diverse recreation opportunities, such as jetboat racing, multiple-use trails, rock hounding, recreational mining, historic site exploration, and wildlife viewing.

- Demand for increased visitor services, such as river patrols, law enforcement, and educational activities.

The following planning issues share one theme: the growth of different types of recreation use on the river (see Figure 2-1 and 2-2). How much recreation use can and should the river support? In addition, how many visitors to the river by watercraft can and should the river support?

Motorized Boating

How should motorized boating (commercial, private, and competitive) be managed (how many, what type, permitted season, river reach, mix between commercial and private)? Motorized boats are defined as boats with a motor, regardless of the horsepower rating.

The increase in the number of visitors using motorboats, especially motorized tour boats (MTBs), has prompted concerns over conflicts among motorized boating and nonmotorized floating, boat angling, and landowners. The visitor use conflicts are most evident during the hot summer weekends and the fall fishing season. Under current management, the number of commercial motorized permittees is limited. Motorized boating contributes to competition for fishing areas. Many anglers and other users resent the noise, wake, and potential safety problems of motorized boating. The issue also includes a concern over streambank erosion/deposition as it affects the condition of riparian areas, loss of private land, and possible impacts to sensitive fish species.

Nonmotorized Floating

How should nonmotorized floating (commercial, private, and competitive) be managed (how much, what kind, permitted season, mix between commercial and private)? Does visitor use by nonmotorized floating affect sensitive fish species? Nonmotorized floating means watercraft without a motor (inflatable rafts, hard shell and inflatable kayaks, driftboats, and canoes).

The growth of nonmotorized floating has prompted concerns over conflicts among nonmotorized floaters and motorized boaters, anglers, and landowners. The social problems are most evident during the hot summer weekends. The number of commercial permittees is not limited in the Hellgate Recreation Area under current management. Visitors to the river by watercraft have the choice to either take a private trip or employ the services of a commercial outfitter.

Nonmotorized Boat Angling

How should a quality nonmotorized boat angling experience be maintained or enhanced (how much, what kind, permitted season, mix between commercial and private watercraft use)? Nonmotorized boat angling means fishing from a watercraft without a motor (inflatable rafts, hard shell and inflatable kayaks, driftboats, and canoes).

The nonmotorized boat angling experience issue has four main components: competition for fishing areas, angler versus boating conflicts, biological health of fisheries resources, and noise and safety conflicts between nonmotorized angling watercraft users and motorboat users. The motorized tour boat service was identified by anglers as a major point of controversy.

User Fees

Should user fees be levied on all visitors using watercraft within the Hellgate Recreation Area? How can fees that are collected be reinvested in on-the-ground management? Should all visitors pay their share for the cost of management services and facilities provided?

Recreational Opportunities

What types of recreational opportunities, facilities, and services should be provided?

How and Where Should Camping be Managed?

How should BLM contribute to the developed and undeveloped camping opportunities while protecting river resources? What level and type of developments are appropriate?

What Type of Day-Use Areas Should be Provided?

What type of day-use recreational opportunities should be provided? Should there be more Watchable Wildlife sites?

Day-use activities that occur in the planning area include, but are not limited to, driving for pleasure, fishing, recreational mining, wildlife observation, rock hounding, picnicking, sightseeing, photography, sunbathing, boating, swimming, and hunting.

What Action Should be Taken to Manage Public Access?

Are additional or improved boat ramps and fishing access sites needed? Should vehicular access be regulated? How should BLM contribute to the developed and undeveloped trails while protecting river resources? What level and type of developments are appropriate?

There are many launch and landing sites with crowding problems and visitors exhibiting rude behavior during periods of high use. The limited number and primitive quality of trails within the Hellgate Recreation Area restricts access for recreationists. A trail system to accommodate a broad range of visitors (hikers, equestrians, anglers, bicyclists) could be developed to improve access opportunities to the Hellgate Recreation Area and adjacent public lands.

What Action Should be Taken to Provide Visitor Services?

How should visitor services be provided? Should there be administrative and/or visitor center sites?

A visitor center (VC) can accommodate a broad range of visitors, including boaters, hikers, recreational miners, sightseers, and picnickers. Visitor services provide educational and tourist information for people interested in the resources available in the Hellgate Recreation Area and the surrounding area.

Range of Planning Alternatives

Each alternative offers a possible course of action that, if selected, would provide direction for land use and guidelines for future decisions (see Table S-1). The alternatives respond to the issues identified during the "scoping" phase of the planning process.

Alternative A: Fewer Watercraft and Less Visitor Use

The goals of Alternative A are to improve and manage natural resource conditions, significantly reduce watercraft use levels, and provide recreational opportunities in a less crowded setting while protecting the environment and the outstandingly remarkable values. The sights, sounds, and overall level of interaction between individuals or groups would be low to moderate. The watercraft use levels would be managed at the level that existed in 1985, before the user conflicts

began. No new facilities would be developed. Management of visitor use would occur on-site and off-site through fees, regulations, and limitations. Special Recreation Permits (SRP) and fees would be required for commercial outfitters. User fees and permits would be required for commercial and private watercraft users and the number of permits would be limited. On-site management and controls would fit into the natural landscape to the greatest degree possible. This alternative reflects a time with less visitor use than exists today.

Alternative B: No Action or Current Management

The goals of Alternative B are to continue present levels of management while protecting the environment and the outstandingly remarkable values. Alternative B is the No Action Alternative required by the National Environmental Policy Act and is the baseline to which the other alternatives are compared. Special Recreation Permits (SRP) and fees would be required for commercial outfitters. Motorized tour boat and commercial motorized angling permits would be capped; overall recreation use levels would be unregulated. User fees and permits would not be required. The sights, sounds, and interactions between individuals and groups would be moderate to high. For analysis purposes, the number of watercraft trips is assumed to remain constant through 2006. On-site management and controls would be evident in some areas and lacking in others.

Alternative C: Angler and Floater Enhancement/ More Watercraft and Visitor Use

The goals of Alternative C are to enhance and manage the angling and floating experience while protecting the environment and outstandingly remarkable values. The alternative would be designed to minimize potential impacts to the fisheries resource and increase fishing opportunities while enhancing the fishing experience. This alternative would maximize floating opportunities and enhance the floating experience. Facilities to serve the angling and floating public would be developed. Special Recreation Permits (SRP) and fees would be required for commercial outfitters. User fees and permits would be required and the number of permits would be limited for all watercraft users, if use limits are reached. Except for commercial motorized tour boats and commercial motorized angling, overall recreation use levels would continue to increase until use limits are reached. Once use limits are reached, an amendment to this plan would occur. The sights, sounds, and interaction between individuals and groups would be moderate to high.

Alternative D: Maximum Watercraft and Visitor Use

The goals of Alternative D are to maximize and manage the level of recreational use while protecting the environment and the outstandingly remarkable values. The sights, sounds, and interactions with other individuals or groups would often be high. Facilities to enhance recreational opportunities, such as camping, boating, angling, and vehicle-oriented activities, would be developed. On-site management and controls would be obvious, but limited to those necessary for public health and safety as well as to accommodate increased numbers of visitors. Special Recreation Permits (SRP) and fees would be required for commercial outfitters. User fees and permits would be required for all watercraft users. Commercial motorized tour boats and commercial motorized angling would be regulated, but at a higher level of use than the other alternatives.

Alternative E: The Proposed Action

The goals of Alternative E (Proposed Action) are to manage the level of recreational use while protecting the environment and the outstandingly remarkable values. The sights, sounds, and interactions with other individuals or groups would often be high. The Proposed Action would be

designed to minimize potential impacts to the fisheries resource and increase fishing opportunities while enhancing the fishing experience. This alternative would also maximize floating opportunities and enhance the floating experience. Special Recreation Permits (SRP) and fees would be required for commercial outfitters. User fees and permits would be required and the number of permits would be restricted for all watercraft users, if use limits are reached. Except for commercial motorized tour boats and commercial motorized angling, overall recreation use levels would continue to increase until use limits are reached. Once use limits are reached, an amendment to this plan would occur.

Rogue River Studies

In response to the issues and concerns identified during scoping, contracted and independent studies were conducted to gather additional information to assist in future decisions related to the river.

Studies included:

- **Boating Safety.** This study identified, mapped, and described sites of potential safety risk to boaters. Recommendations, such as the use of “spotters” at certain points along the river and designation of a lead or “scout” boat in parties, were made to reduce risks.
Water Resources Consulting 1995
- **Fisheries.** This effort focused on the effects of boat traffic on juvenile salmonids. It concluded that all types of watercraft disturbed juvenile salmonids.
Oregon Department of Fish and Wildlife 1995
- **Economic Effects.** All aspects of river use were evaluated to determine their relationships to the local economy. Recreational use of the river was found to be a significant economic contributor to the area.
Economic Strategies Northwest 1994
- **Erosion.** Erosion sensitive sites within the study area were mapped and evaluated. Five percent of the area was found to be sensitive. Most erosion was naturally-caused and some erosion was due to motorized boats and other human-caused sources.
Oregon State University 1993
- **Cultural Resources.** This study included a literature and field review. All cultural resources were mapped and described for the area. The study recommended protective measures and educational opportunities and listed areas unsuitable for recreational use or development.
Cascade Research of Ashland 1994/Resource Inventory 1995
- **Landowner Attitudes.** Interviews with riverside land owners were conducted to assess general perceptions relative to each type of use. The study concluded that motorized boats were the least favorable use in the eyes of landowners.
Southern Oregon University 1994
- **Visitor Attitudes.** User groups were identified and interviewed to determine their perceptions of the quality of their recreation experience and their satisfaction levels. A majority in all groups recognized the existence of crowding and user conflicts though they all were generally satisfied with the quality of their recreation experience.
Oregon State University 1992

Executive Summary Tables

Table S-1. Issues by Alternatives

Issues	Alternative A Fewer watercraft and Less visitor use	Alternative B Current Management No Action	Alternative C Angler and floater enhancement More watercraft and visitor use	Alternative D Maximum watercraft and Visitor use	Alternative E Proposed Action
Summary	Significantly reduces watercraft use levels. Provides recreation opportunities in a less crowded setting. User fees and permits required for all user groups. Limitation on number of permits.	Continue present use levels and management methods. Motorized use remains static while nonmotorized continues to grow. Permits required for commercial outfitters.	More float craft and visitor use. Enhances floating and angling experience. Minimizes potential impacts to fisheries. Further restricts motorized use. Fees and permits required and number of permits restricted for all watercraft users, if use limits are reached. Once use limits are reached, an amendment to this plan would occur.	Maximizes all types of recreation uses. Recreation use levels increase, causing a high degree of interaction among user groups. Fees and permits required for all watercraft users.	Recreation uses are not restricted. Enhances floating and angling experience. Minimizes potential impacts to fisheries. Further restricts motorized use. Fees and permits required and number of permits restricted for all watercraft users, if use limits are reached. Once use limits are reached, an amendment of this plan would occur.
Motorized Boating					
MTBs	Applegate Reach: 12 trips per day. Dunn Reach: 8 trips per day. 4 trips per day on weekends and holidays in July and August.	Applegate Reach: 19 trips per day. Dunn Reach: 19 trips per day. 6 trips per day on weekends and holidays in July and August.	Applegate Reach: 12 trips per day. Dunn Reach: 8 trips per day. 4 trips per day on weekends and holidays in July and August.	Applegate Reach: 26 trips per day. Dunn Reach: 16 trips per day. 8 trips per day on weekends and holidays in July and August.	Applegate Reach: 19 trips per day. Dunn Reach: 8 trips per day. 4 trips per day before noon on weekends and holidays in July and August.
Commercial Motorized Angling	2 trips per day.	4 trips per day for 2 permits; 2 trips per year for one permit.	6 trips per day.	60 trips per day.	6 trips per day.
Private	5 trips per day.	No limits.	Possible limits in future.	No limits.	Possible limits in future.

Table S-1. Issues by Alternatives

Issues	Alternative A Fewer watercraft and Less visitor use	Alternative B Current Management No Action	Alternative C Angler and floater enhancement More watercraft and visitor use	Alternative D Maximum watercraft and Visitor use	Alternative E Proposed Action
Special Boating Events	2 events. No new events.	2 events. New events considered.	No events. No new events.	5 events. New events considered.	2 events. New events considered.
Nonmotorized Boating					
Floating	120 boat trips per day.	No limits.	500 boat trips per day.	No limits.	Possible limits in future.
Angling	30 boat trips per day.	No limits.	Possible limits in future.	No limits.	Possible limits in future.
Boater Fees and Permits and User Fees					
Boater Permits	Permits required for all watercraft.	Permits required for commercial watercraft.	Permits required for all watercraft. Number of permits may be limited in future.	Permits required for all watercraft.	Permits required for commercial watercraft. Permits may be required in future for private watercraft.
User Fees	Fees for all watercraft. No vehicle access fees.	Fees for commercial watercraft. Fees not required for private watercraft. No vehicle access fees.	Fees for commercial watercraft. Private watercraft fees possible in future. No vehicle access fees.	Fees for all watercraft. Vehicle access fees required.	Fees for commercial watercraft. Private watercraft and vehicle access fees possible in future.
Recreational Opportunities					
Camping	No primitive camping. 8 developed areas.	No new primitive areas. 9 developed areas.	No new primitive areas. 18 developed areas.	5 new primitive areas. 27 developed areas.	5 new primitive areas. 15 developed areas.
Day-Use	13 primitive areas. 6 developed areas.	10 primitive areas. 7 developed areas.	11 primitive areas. 7 developed areas.	8 primitive areas. 10 developed areas.	6 primitive areas. 6 developed areas.
Public Access	2 trails. 11 boat ramps. No fishing access sites.	No trails. 12 boat ramps. 4 fishing access sites.	7 trails. 13 boat ramps. 5 fishing access sites.	17 trails. 15 boat ramps. 5 fishing access sites.	7 trails. 13 boat ramps. 3 fishing access sites.
Visitor Services	Maintain Smullin Visitor Center at Rand.	Expand Smullin Visitor Center at Rand.	Maintain Smullin Visitor Center at Rand.	Maintain Smullin Visitor Center at Rand.	Expand Smullin Visitor Center at Rand.

Table S-2. Summary of Environmental Consequences

Issue	Alternative A Fewer watercraft and Less visitor use	Alternative B Current Management No Action	Alternative C Angler and floater enhancement More watercraft and visitor use	Alternative D Maximum watercraft and Visitor use	Alternative E Proposed Action
Outstandingly Remarkable Values					
Natural Scenic	Protect and enhance.	Protect and enhance.	Protect and enhance.	Protect and enhance.	Protect and enhance.
Fisheries	Protect and enhance.	Protect and enhance.	Protect and enhance.	Diminished effect.	Protect and enhance.
Recreation	Protect and enhance.	Protect and enhance.	Protect and enhance.	Protect and enhance.	Protect and enhance.
Resources					
Air Resources	No change.	No change.	No change.	No change.	No change.
Fire Risk	Beneficial effect.	No change.	Not a beneficial effect.	Not a beneficial effect.	No change.
Soils	Beneficial effect.	No change.	Beneficial effect.	No change.	Beneficial effect.
Water Quality	Beneficial effect.	No change.	Beneficial effect.	Not a beneficial effect.	Beneficial effect.
Riparian Areas, Wetlands, and Flood Plains	Beneficial effect.	No change.	Beneficial effect.	Beneficial effect.	Beneficial effect.
Botanical Resources	Beneficial effect.	No change.	Beneficial effect.	Not a beneficial effect.	Beneficial effect.
Fisheries	Beneficial effect.	Beneficial effect.	Beneficial effect.	Not a beneficial effect.	Beneficial effect.
Wildlife	No change.	No change.	No change.	Not a beneficial effect.	No change.
User Groups					
Motorized Boaters					
Private	Not a beneficial effect.	No change.	No change.	Not a beneficial effect.	No change.
Commercial Anglers	Not a beneficial effect.	Not a beneficial effect.	Beneficial effect.	Not a beneficial effect.	Beneficial effect.

Table S-2. Summary of Environmental Consequences

Issue	Alternative A Fewer watercraft and Less visitor use	Alternative B Current Management No Action	Alternative C Angler and floater enhancement More watercraft and visitor use	Alternative D Maximum watercraft and Visitor use	Alternative E Proposed Action
MTBs	Not a beneficial effect.	No change.	Not a beneficial effect.	Beneficial effect.	No change.
Special Boating Events Participants and Spectators	Beneficial effect.	Beneficial effect.	Not a beneficial effect.	Beneficial effect.	Beneficial effect.
Nonmotorized Boaters	Beneficial effect.	No change.	Beneficial effect.	Not a beneficial effect.	Beneficial effect.
Boat Anglers	Not a beneficial effect.	No change.	Beneficial effect.	Not a beneficial effect.	No change.
Bank Anglers	Beneficial effect.	Beneficial effect.	Beneficial effect.	Not a beneficial effect.	Beneficial effect.
Campers and Day-Use Visitors					
	Not a beneficial effect.	Beneficial effect.	Beneficial effect.	Beneficial effect.	Beneficial effect.
Recreational Miners	Not a beneficial effect.	Beneficial effect.	Beneficial effect.	Beneficial effect.	Beneficial effect.
Trail Users	Beneficial effect.	No change.	Beneficial effect.	Beneficial effect.	Beneficial effect.
Visitor Services	No change.	Beneficial effect.	No change.	No change.	Beneficial effect.
Conditions					
Boating Safety	Beneficial effect.	Not a beneficial effect.	Beneficial effect.	Not a beneficial effect.	Beneficial effect.
Law Enforcement and Emergency Services	Not a beneficial effect.	No change.	Not a beneficial effect.	Not a beneficial effect.	Not a beneficial effect.
Outfitter Services	Beneficial effect.	No change.	Beneficial effect.	Beneficial effect.	No change.

Table S-2. Summary of Environmental Consequences

Issue	Alternative A Fewer watercraft and Less visitor use	Alternative B Current Management No Action	Alternative C Angler and floater enhancement More watercraft and visitor use	Alternative D Maximum watercraft and Visitor use	Alternative E Proposed Action
Landowners	Beneficial effect.	No change.	Beneficial effect.	Not a beneficial effect.	Beneficial effect.
Sound	No change.	No change.	No change.	No change.	No change.
Transportation	No change.	No change.	No change.	No change.	No change.
Socioeconomics	Not a beneficial effect.	No change.	No change.	Beneficial effect.	No change.
Environmental Justice	No change.	No change.	No change.	No change.	No change.
Management Costs	Not a beneficial effect.	Not a beneficial effect.	Not a beneficial effect.	Not a beneficial effect.	Not a beneficial effect.
Gross Revenues	Not a beneficial effect.	No change.	Not a beneficial effect.	Beneficial effect.	Beneficial effect.
NOTE: “No change” – no change, or little to no effect. “Not a beneficial effect” – adverse effect. “Beneficial effect” – the resource or condition is enhanced or benefitted, or the user group’s activity and/or experience is enhanced.					

Table S-3. Rationale for Proposed Action

Activity	Issue	Published DEIS Preferred Alternative	FEIS Proposed Action	Rationale
All Watercraft Use				
	Angling Enhancement Zones	8 zones designated: Confluence of Applegate River, Whitehorse Riffle, Finley Bend, Brushy Chutes, Ferry Hole, Hellgate Canyon, Taylor Creek Gorge, and Morrison's Lodge Hole.	8 zones designated: Confluence of Applegate River, Whitehorse Riffle, Finley Bend, Brushy Chutes, Ferry Hole, Hellgate Canyon, Taylor Creek Gorge, and Morrison's Lodge Hole.	Enhances boat and bank angling, providing a maximum number of anglers and opportunity to use these primary fishing areas.
	Fall Chinook Spawning Areas	4 areas designated: No motorized use in Whitehorse Riffle, Matson Riffle, Panther Chutes, and Wharton Riffle.	14 areas designated: Discourage motorized use during spawning season in Applegate Riffle, Whitehorse Riffle, Matson Riffle, Panther Chutes, Wharton Riffle, Brushy Chutes, Lower Banfield Chute, Robertson's Riffle, High Banks Riffle, Pickett Riffle, Peach Orchard Riffle, Weatherby Riffle, Two-Bit Riffle, and Jumpoff Joe Riffle.	The change is directly germane to the issue of use limitations or other restrictions on private recreation use. Unless and until private recreation use is regulated or restricted, passive management efforts would be used to minimize human impacts on the fishery resource. These efforts will emphasize educational and interpretive methods to discourage watercraft and land-based activities in the identified spawning areas. Brochures, signing, public contacts on the river by BLM staff, web-based information, and other mediums will be used.
	Sound Sensitive Areas	4-mile area designated from Flanagan Slough to Jumpoff Joe Creek. No thrill power maneuvers allowed in this area between 10:00 am and 5:00 pm.	4-mile area designated from Flanagan Slough to Jumpoff Joe Creek. No thrill power maneuvers allowed in this area between 10:00 am and 5:00 pm.	Addresses landowners' concerns about noise and allows for peaceful enjoyment of riverbank property.

Table S-3. Rationale for Proposed Action

Activity	Issue	Published DEIS Preferred Alternative	FEIS Proposed Action	Rationale
Private Motorized Boating				
	Use Levels	No limits. Limits in the future if carrying capacity is reached.	No limits. Restricted in the future, if monitoring indicates safety concerns, increase in user conflicts, or visitor use satisfaction declines.	Present use levels of private motorized boats are very low.
	Season of Use	Year-round in the Applegate Reach. Year-round in the Dunn Reach, except afternoons on July and August weekends and 4 th of July holiday.	Year-round in the Applegate and Dunn reaches. Restricted in the future, if monitoring indicates safety concerns, increase in user conflicts, or visitor use satisfaction declines.	Present use levels of private motorized boats are very low.
Commercial Motorized Angling				
	Season of Use	May 1 - September 15; extension to September 30, providing monitoring indicates no fall chinook spawning is occurring.	Applegate Reach: December 1 - September 30, providing monitoring indicates no fall chinook spawning is occurring. Dunn Reach: September 1 - May 31, providing monitoring indicates no fall chinook spawning is occurring.	Applegate Reach restrictions protect and enhance fisheries by reducing motorized use during the fall chinook spawning season. Dunn Reach restrictions reduces conflicts during the high use months of July and August. Management option to stop motorized boats and other possible adverse activities when fish are spawning. The concern is the impact on spawning and pairing behavior and on juvenile fish (BLM Manual 6840-Special Status Species Policy).
	Number of Permits	3 permits. Additional permits could be allocated on a case-by-case basis.	3 permits. No additional permits would be allocated.	Encourages drift boat angling and provides a net reduction in motorized use. Reduces social conflicts among the various user groups.

Table S-3. Rationale for Proposed Action

Activity	Issue	Published DEIS Preferred Alternative	FEIS Proposed Action	Rationale
Motorized Tour Boats	Permitted Trips per Day	2 trips per day during season of use for 2 permits; 2 trips per year during season of use for other permit. Additional trips could be authorized on a case-by-case basis.	2 trips per day during season of use for each permit. Allowed 1 boat per day per permit. No additional trips per day would be allocated.	Trips were limited to historical use, pending completion of the RAMP. Encourages drift boat angling and provides a net reduction in motorized use. Reduces conflicts among user groups.
	Boat Size	Up to 6 passengers.	Up to 6 passengers.	Maximum limit set by Oregon State Marine Board for commercially-operated power boats.
	Season of Use	May 1 - September 15; extension to September 30, providing monitoring indicates no fall chinook spawning is occurring.	May 1 - September 30, unless monitoring indicates fall chinook spawning is occurring.	Management option to stop MTBs if fish spawn early. The concern is the effect on fall chinook salmon spawning and pairing behavior and on juvenile fish (BLM Manual 6840-Special Status Species Policy).
	Number of Permits	2 permits.	2 permits	Any proposal by the current permit holder to alter the permits or allocation would require additional NEPA analysis.
	Use Levels	Applegate Reach: 19 trips per day. Dunn Reach: 8 trips per day and 4 trips per day before noon on weekends and holidays in July and August. No trips after noon.	Applegate Reach: 19 trips per day. Dunn Reach: 8 trips per day and 4 trips per day before noon on weekends and holidays in July and August. No trips after noon. Additional limits on trips per day or other operating parameters may be required if monitoring indicates safety concerns, increase in user conflicts, or adverse effects on visitor satisfaction or fish populations.	FEIS use levels would be the same levels as 1991, when use was reduced from 23 to 19 trips per day. Complaints decreased considerably after the trip reduction. Use levels are considered appropriate, as determined through interdisciplinary team review. The RAMP divides the river into 2 reaches: Applegate and Dunn reaches. Management in the Applegate Reach places greater emphasis on jet boaters and boat and bank anglers. Dunn Reach management focus is primarily to enhance the float boater's experience. The majority of conflicts with the MTBs occur in the Dunn Reach during July and August weekends and

Table S-3. Rationale for Proposed Action

Activity	Issue	Published DEIS Preferred Alternative	FEIS Proposed Action	Rationale
				holidays. The number of runs in the Dunn Reach would be reduced to lessen crowding (on-river social conflicts) and enhance safety concerns. The periods in which MTB use does not reach 19 trips per day are, in general, on weekdays in July and August and the months of May, June, and September. This is also the period of lowest use by float craft. Capping use at 19 trips per day gives the permittee the flexibility to increase business during the week and the shoulder season.
				The 1972 Plan states, “No action to regulate boat use will be initiated unless public safety or the recreation experience is threatened.” User studies indicate user satisfaction is high (Shindler and Shelby 1993). If monitoring indicates a need to reduce the number of trips in the future, they can be reduced at that time.
	Separation Times	Less than 2 minutes between boats in a group. Maximum of 19 trips per day organized into 6 or fewer groups per day.	Less than 2 minutes between boats in a group. Maximum of 19 trips per day organized into 6 or fewer groups per day.	Boat separation times of less than 2 minutes between boats within an MTB group reduces conflicts (encounters) with other users by compressing encounter time.

Table S-3. Rationale for Proposed Action

Activity	Issue	Published DEIS Preferred Alternative	FEIS Proposed Action	Rationale
	Boat Size	All MTBs up to 36'x12'6".	One boat up to 43'x14'. All other MTBs up to 36'x12'6". One large boat would be phased out after the Record of Decision is signed.	Interim permit stipulations for the MTB permit indicated that removal of the larger boats (two are currently allowed) would occur by the 1995 and 1996 seasons. These stipulations also included the provision that if studies revealed that use of the larger boats was compatible with the protected values of the Rogue River, then the removal stipulation could be modified. Subsequent studies on the impacts of jet boat use on the Rogue River, including those on soil erosion, fisheries, and boating safety and conflicts, did not find a significant difference between the impacts from the 36' boats and those from the 42' boats. The 1995 <i>Rogue River Boating Safety and Conflicts Study</i> did not recommend elimination of the larger boat.
	Notice of Display	Required for all MTBs.	Boat sequence signing required for all MTBs in a group.	The number and order of boats in a group will be posted on each boat. Alerts other river users to how many boats are in a group and how many to expect.
	Off Plane Procedures	Required in Hellgate Canyon, at boat ramps, at county-designated swim areas, and in erosion sensitive areas.	Required in Hellgate Canyon (Also see No-Wake Zones).	Hellgate Canyon is a narrow area containing float craft congestion. This requirement benefits boater safety. The other areas listed in the DEIS were already included in the No-Wake Zone section.
	Daily Schedule	Required; changes not authorized.	Required; changes not authorized.	Minimizes conflicts by informing river users of the approximate times MTBs will pass certain locations on the river.

Table S-3. Rationale for Proposed Action

Activity	Issue	Published DEIS Preferred Alternative	FEIS Proposed Action	Rationale
	Daily Use Window	May through August 14 9:00 am - 8:30 pm. August 15 through September 9:30 am - 8:30 pm.	May through August 9:00 am - 8:30 pm. September 9:30 am - 8:30 pm.	<p>The probability for user conflicts between MTBs and float traffic is greatest May 1-August 31. Float activity diminishes in September, while the probability for conflicts with anglers increases. Fishing activity generally occurs earlier in the day, whereas float activity occurs later in the morning.</p> <p>Early entry time through August will ease congestion at Hog Creek and downstream points during peak float times.</p> <p>The later entry time in September reduces conflicts with anglers.</p>
	Two-Way Radio Communication	Required.	Required. BLM and MTBs have mutual use of MTB radio channel.	<p>Routine safety procedure. Benefits safety of all river users.</p> <p>Two-way radios reduce chance of encounters on blind corners and in areas of congestion. BLM staff can monitor for problems and locations of MTBs.</p>
	Safety Sites of Concern	Spotters required when view and set-down conditions are not met.	Sites would be designated annually. Land or lead boat spotters required.	<p>Benefits safety of all river users.</p> <p>Land and lead boat spotters reduce chance of encounters on blind corners and in areas of congestion.</p>
	No-Wake Zones	No-wake at boat ramps, county-designated swim areas, and erosion sensitive areas.	1 no-wake zone designated: Bybee Hole. No-wake at boat ramps, near people working at water level, and at Josephine County designated swim areas.	<p>The no-wake zone designated by the BLM addresses landowners' concerns and resource health issues pertaining to erosion caused by motorized boats.</p> <p>State law requires no-wake at boat ramps, near people working at water level, and at Josephine County designated swim areas. Regulated by OSMB.</p>

Table S-3. Rationale for Proposed Action

Activity	Issue	Published DEIS Preferred Alternative	FEIS Proposed Action	Rationale
	Thrill Power Maneuvers	Some thrill power maneuver areas identified as appropriate. Thrill power maneuvers are allowed outside designated erosion sensitive areas; outside designated sound sensitive area after 10:00 am and before 5:00 pm.	Thrill power maneuver areas identified on an annual basis, as appropriate. Areas designed to minimize erosion, noise, and interference with anglers. Areas would be modified, if necessary, throughout the season. Maneuvers would be allowed between 10:00 am and 5:00 pm.	Thrill power maneuvers enhance the MTB user's experience. Restricting place and time of maneuvers addresses public safety concerns, landowner's peaceful enjoyment of property, and reduces user conflicts.
	Erosion Sensitive Areas	Erosion sensitive areas designated; interim no-wake zones in the following areas: 1000 Rocks, Wharton/Flanagan, Little Pickett, and O.K. Corral.	4 areas: Wharton/Flanagan, Bybee Hole, Little Pickett, and O.K. Corral.	Recent inspection of erosion sensitive areas resulted in different conclusions regarding designation of no-wake zones. <ul style="list-style-type: none"> • Bybee Hole is sensitive to wake-caused erosion. No-wake zone designated at Bybee Hole to mitigate erosion by motorized boats. • Wharton/Flanagan and Little Pickett areas would not meet motorized boat set-down requirements at typical summer water levels. No-wake operation may not be possible. Other actions may be needed. • Jumpoff Joe area does not appear to be susceptible to wake-caused erosion. These sites require further monitoring. Designation of erosion sensitive areas would benefit landowners' concerns and resource health issues pertaining to erosion.
Special Boating Events	Use Levels	2 events: • Memorial Day Boatnik • Labor Day A greater number of events would be considered on a case-by-case basis.	2 events: • Memorial Day Boatnik • Labor Day New events would be considered on a case-by-case basis, pending NEPA analysis.	Clarifies that NEPA analysis will be conducted for new events.

Table S-3. Rationale for Proposed Action

Activity	Issue	Published DEIS Preferred Alternative	FEIS Proposed Action	Rationale
Nonmotorized Floaters	Season of Use	Year-round.	Year-round, providing monitoring indicates no fall chinook spawning is occurring.	Management option to stop possible adverse activities when fall chinook salmon are spawning. The concern is the effect on spawning and pairing behavior and on juvenile fish (BLM Manual 6840-Special Status Species Policy).
	Times of Use	Entries limited to two hours per day.	Two hours per day for current permitted events. River closures for new events, if necessary, would be limited to two hours per day.	At present, the two hours per day closure requirements are specific to Memorial Day Boatnik and Labor Day boat races. River closure is due to safety concerns by Josephine County Marine Deputies, and to allow other users access to the river. New events may not require river closures.
	Permissible Areas	Applegate and Dunn reaches.	Applegate and Dunn reaches.	Prior NEPA analysis indicates existing events are compatible with management goals.
	Season of Use	Year-round.	Year-round in both reaches.	Not a regulated use (see Use Levels).
	Use Levels	No limits. Limits in the future, if carrying capacity is reached.	Limited in the future, if monitoring indicates safety concerns, increase in user conflicts, or adverse effects to visitor satisfaction.	Floater's satisfaction is presently moderate to high (Shindler and Shelby 1993). Users are still drawn to the river for its enjoyable recreation opportunities. Visitors are not going elsewhere due to a decline in interest precipitated by conflicts or crowding, known as displacement (Shelby and Heberlein 1986). Monitoring of user satisfaction levels through periodic sampling would be utilized to maintain a current assessment of the quality of the recreation experience as expressed by floaters.
	Boat Angling	Not applicable.	Not applicable.	Angling is regulated by Oregon Department of Fish and Wildlife.

Table S-3. Rationale for Proposed Action

Activity	Issue	Published DEIS Preferred Alternative	FEIS Proposed Action	Rationale
Boater Fees, Permits, and User Fees				
	Commercial Watercraft	Fees and permits are required. Limited permits in the future, if use limits are reached.	Special Recreation Permit fees and permits are required. Number of permits may be limited in the future, if monitoring indicates safety concerns, increase in user conflicts, or adverse effects to visitor satisfaction.	User satisfaction is currently moderate to high (Shindler and Shelby 1993).
	Private Watercraft	Fees and permits not required.	Fees and permits may be required in the future, if monitoring indicates safety concerns, increase in user conflicts, or adverse effects to visitor satisfaction.	User satisfaction is currently moderate to high (Shindler and Shelby 1993).
	User Fees for All Users	No user fees. Vehicle access would not be regulated. Day-use permits would not be required for parking.	Fees required for commercial watercraft users, private watercraft users, and for vehicle access, if monitoring indicates safety concerns, increase in user conflicts, or adverse effects to visitor satisfaction.	Fees would only be implemented to address use limits, user satisfaction/conflict issues, or to meet deferred maintenance needs, if indicated through monitoring. Once use limits are reached, an amendment to this plan would occur.
Camping				
	Corridor Areas Open to Camping	Hellgate Canyon to Grave Creek.	Dunn Reach (Hog Creek to Grave Creek). Rocky Bar.	Opening up more of the river corridor to primitive camping provides more recreation opportunities, enhances the recreation experience by reducing competition for camping areas, and reduces impacts to individual sites by dispersing use to more sites.

Table S-3. Rationale for Proposed Action

Activity	Issue	Published DEIS Preferred Alternative	FEIS Proposed Action	Rationale
	New Primitive Camp Areas	3 areas: North Zigzag Creek, Zigzag Creek, and Rocky Bar.	5 areas: North Zigzag Creek, Zigzag Creek, Dunn, Lower Dunn, and Hellgate Beach.	Opening up more of the river corridor to camping added two new primitive camping areas. These areas provide more recreation opportunities, reduce competition for camping areas, and reduce impacts to individual sites by dispersing use. Hellgate, Dunn, and Lower Dunn were inadvertently left out of the DEIS PA and Rocky Bar has been added to developed camp areas.
	Human Waste Pack Out	Required.	Required for all users.	Requiring users to pack out human waste enhances and protects the river environment, reduces health hazards, and enhances scenery and the recreational experience.
	Campfires	State regulations. Fire pans required where fire grates (or equivalent) are not provided.	State regulations. Fire pans required.	State regulations prevail during fire season. Protects the environment and the recreational experience by reducing fire risk and the visual impacts of fire scars.
	Length of Stay Limits	4 days per site during high summer use, unless otherwise posted.	14 days per site, unless otherwise posted.	Length of stay limit changed to maintain consistency with Bureau-wide policy and Medford District BLM limits stated in the RMP.
	Group Size Limits	30 people per campsite.	30 people per campsite.	Practical size for resource protection at most sites. Maintains consistency with group size limits for the wild section of the Rogue.

Table S-3. Rationale for Proposed Action

Activity	Issue	Published DEIS Preferred Alternative	FEIS Proposed Action	Rationale
Day-Use Only Areas				
	Primitive Day-Use Only Areas	13 areas: Brushy Chutes, Flanagan Slough, Steelhead, Hussey Lane, North Zigzag Creek, Zigzag, Lower Dunn, Hellgate Bridge Area, Hellgate, Stratton Creek, Paint Creek, Upper Ennis, and Rocky Bar.	6 areas: Brushy Chutes, Flanagan Slough, Hussey Lane, Hellgate Bridge Area, Bud Lewis, and Bailey Creek.	<p>These areas provide a natural environment for recreationists.</p> <p>Recreation sites have been removed from duplicate categories in the FEIS. They are now listed in their primary use category. Adding the word “only” to this category has eliminated the listing of sites that can also be used for camping.</p>
	Developed Day-Use Only Areas	17 areas: Applegate Landing, Finley Bend, Griffin Lane Complex, Robertson Bridge Area, Hog Creek, Hellgate Canyon Viewpoint, Hellgate Bridge Viewpoint, Hellgate Recreation Site, Lower Hellgate, Rainbow, Carpenters Island, Bud Lewis, Robert Dean, Chair Riffle, Rand Historic Site, Argo, and Grave Creek.	6 areas: Applegate Landing, Griffin Lane Complex, Hellgate Canyon Viewpoint, Hellgate Bridge Viewpoint, Hellgate Recreation Site, and Rand Historic Site.	<p>To protect the natural environment by encouraging use in developed areas.</p> <p>Improvements will enhance the recreation experience and public health and safety.</p> <p>Recreation sites that were listed in duplicate categories in the DEIS are now listed in their primary use category.</p> <p>The Bud Lewis site was removed from Developed Day-Use Only and added to Primitive Day-Use Only because this site represents one of the few alluvial plains not heavily disturbed by mining; it is characterized by large conifers and cottonwood; and it provides current and potential habitat for a range of wildlife species, including great blue herons, osprey, bald eagles, and neotropical migrants. This site does not have a history of established recreational use, which provides a unique opportunity to implement management without the constraints of established recreational use patterns.</p>
	Back Country Byways	1 byway: Galice-Hellgate National Back Country Byway.	1 byway: Galice-Hellgate National Back Country Byway.	This byway was designated in the Medford District RMP.

Table S-3. Rationale for Proposed Action

Activity	Issue	Published DEIS Preferred Alternative	FEIS Proposed Action	Rationale
	Watchable Wildlife Sites	4 sites: Whitehorse, Flanagan Slough, Hog Creek, and Hellgate Canyon Viewpoint.	3 sites: Whitehorse, Hog Creek, and Hellgate Canyon Viewpoint.	Protect potential nesting habitat for raptors and great blue herons. Flanagan Slough was removed from the Watchable Wildlife Sites and added to Primitive Day-Use Only to protect wildlife habitat and the river environment. This area provides a large area of flat water separated from the main channel of the river. This slack water is beneficial to a range of species, including western pond turtles, great blue herons, and waterfowl. The vegetated island separating Flanagan Slough from the main channel of the river creates a barrier that minimizes recreation-associated impact to wildlife.
	Firearm Discharge Regulations	Prohibited in the entire river corridor from June 1 to September 15.	Any discharge of a firearm or any other implement capable of taking human life, causing injury, or damaging property is prohibited at any time within 150 yards of a residence, building, developed or undeveloped recreation site, occupied area, or at anytime across or on any public road, or across or on any trail or body of water whereby any person or property is exposed to injury or damages as a result of such discharge.	The prohibition is pursuant to current regulations in 43 CFR 8351.2-1 and <i>Federal Register</i> Vol. 57, No. 110, 1992, 24271-24272.

Table S-3. Rationale for Proposed Action

Activity	Issue	Published DEIS Preferred Alternative	FEIS Proposed Action	Rationale
Public Access				
	Improve and Expand Existing Trails	5 trails: Whitehorse Nature Trail, Buckhorn Mountain, Hellgate, Umpqua Joe, and Robert Dean (Hellgate Bridge to Ash Gulch, Centennial Gulch to Argo).	5 trails: Whitehorse Nature Trail, Buckhorn Mountain, Hellgate, Umpqua Joe, and Robert Dean (Hellgate Bridge to Ash Gulch, Centennial Gulch to Argo).	These formal and informal trails presently exist and are used.
	Develop New Trails	5 trails: Applegate Landing, Flanagan Slough Interpretive, Hellgate Placer Mine of Wells, Robert Dean (Ash Gulch to Centennial, Argo to Grave Creek), and Rainbow.	2 trails: Robert Dean (Ash Gulch to Centennial, Argo to Grave Creek) and Rainbow.	Trails will provide additional access within the river corridor.
	OHV Trails	1 trail: Buckhorn Mountain.	No off-highway vehicle trails will be developed.	Off-highway vehicle trails were removed from the document. Public use of the trail system within the Hellgate Recreation Area, existing or proposed, will be restricted to hikers only (USDI 1972).
	Maintain and Improve Existing Boat Ramps	5 ramps: Griffin, Hog Creek, Rand, Argo, and Grave Creek.	10 ramps: Whitehorse County Park, Ferry Hole County Park, Griffin County Park, Robertson Bridge County Park, Hog Creek, Indian Mary County Park, Ennis Riffle County Park, Galice County Park, Alameda County Park, and Grave Creek.	These sites are currently utilized and are permitted within the recreation area as long as they are necessary to serve the river user (USDI 1972). The DEIS list did not include Josephine County boat ramps. These were added to the FEIS. Rand and Argo were removed from Maintain and Improve Existing Boat Ramps and placed in Improve Undeveloped Boat Access Sites.

Table S-3. Rationale for Proposed Action

Activity	Issue	Published DEIS Preferred Alternative	FEIS Proposed Action	Rationale
	Improve Undeveloped Boat Access Sites	Addressed under Maintain and Improve Existing Boat Ramps.	2 sites: Rand and Argo.	These sites are currently utilized and are permitted within the recreation area as long as they are necessary to serve the river user (USDI 1972).
	Develop New Boat Ramps	None.	None.	The river has a sufficient number of boat ramps.
	Maintain Existing Fishing Access Sites	2 sites: Rainbow and Carpenters Island.	2 sites: Rainbow and Carpenters Island.	These are original sites primarily designed and maintained for fishing access. Other sites, developed and primitive, are available throughout the HRA.
	Develop New Fishing Access Sites	2 sites: Finley Bend and Steelhead.	1 site: Finley Bend (Universally Accessible).	Steelhead Fishing Access Site was removed from the FEIS. Fishing access near Steelhead is provided by Robertson Bridge Boat Ramp.
	Vehicle Access on Gravel Bars	5 areas: Griffin Lane Complex, Rocky Bar, Chair, Rand, and Buckhorn Mountain Trail.	5 areas: Griffin Lane Complex, Rocky Bar, Chair, Rand, and Argo.	Vehicles are prohibited off existing roads within the Rogue National Wild and Scenic River corridor, except for parking at designated gravel bars (<i>Federal Register</i> Vol. 57, No. 110, 1992, 24271-24272). Buckhorn Mountain Trail was removed from the FEIS because all trails within the HRA are designated hiker only.
Visitor Services				
	Facilities Expansion	Rand.	Expand Smullin Visitor Center at Rand.	Expand and modify the existing Rand site to improve customer and administrative services.

Table 6-3. Rationale for Treatment Decision

Category	Issue	Recommended Treatment	Key Considerations	Expected Outcome
Acute Care	Acute Care	Acute Care	Acute Care	Acute Care
	Acute Care	Acute Care	Acute Care	Acute Care
	Acute Care	Acute Care	Acute Care	Acute Care
	Acute Care	Acute Care	Acute Care	Acute Care
Chronic Care	Chronic Care	Chronic Care	Chronic Care	Chronic Care
	Chronic Care	Chronic Care	Chronic Care	Chronic Care
	Chronic Care	Chronic Care	Chronic Care	Chronic Care
	Chronic Care	Chronic Care	Chronic Care	Chronic Care
Preventive Care	Preventive Care	Preventive Care	Preventive Care	Preventive Care
	Preventive Care	Preventive Care	Preventive Care	Preventive Care
	Preventive Care	Preventive Care	Preventive Care	Preventive Care
	Preventive Care	Preventive Care	Preventive Care	Preventive Care

Table 6-4. Rationale for Treatment Decision

Category	Issue	Recommended Treatment	Key Considerations	Expected Outcome
Acute Care	Acute Care	Acute Care	Acute Care	Acute Care
	Acute Care	Acute Care	Acute Care	Acute Care
	Acute Care	Acute Care	Acute Care	Acute Care
	Acute Care	Acute Care	Acute Care	Acute Care
Chronic Care	Chronic Care	Chronic Care	Chronic Care	Chronic Care
	Chronic Care	Chronic Care	Chronic Care	Chronic Care
	Chronic Care	Chronic Care	Chronic Care	Chronic Care
	Chronic Care	Chronic Care	Chronic Care	Chronic Care
Preventive Care	Preventive Care	Preventive Care	Preventive Care	Preventive Care
	Preventive Care	Preventive Care	Preventive Care	Preventive Care
	Preventive Care	Preventive Care	Preventive Care	Preventive Care
	Preventive Care	Preventive Care	Preventive Care	Preventive Care

Chapter 1

Introduction

Chapter 1 Introduction

Summary of Changes

The following changes were made to Chapter 1 between the Draft and the Final EIS. Minor corrections, explanations, and edits are not included on this list.

The “Purpose and Need” section has been expanded to clarify why a plan is needed for the Hellgate Recreation Area.

The *1972 Rogue National Wild and Scenic River, Oregon: Notice of Revised Development and Management Plan* and the *1978 Rogue National Wild and Scenic River Activity Plan for the Hellgate Recreation Section* have been added to the “Relationship to Legislation, BLM Policies, Plans, and Programs” section. They were inadvertently left out of the DEIS.

The Josephine County Parks Department has been added to the “Relationship to Other Policies, Plans, and Programs” section. They are a major contributor of recreational opportunities in the Hellgate Recreation Area.

The “Outstandingly Remarkable Values” section has been expanded to include legislative intent.

The “Planning Area” section has been expanded to describe the two river reaches, the Applegate Reach and the Dunn Reach.

The Oregon Department of Environmental Quality and Oregon Department of Forestry have been added to the “Relationship to Other Policies, Plans, and Programs” section.

The “Management Goals and Standards” section has been expanded to reflect the goals that describe a desired condition to be achieved and program management standards, which direct what will and will not occur to achieve the desired goals.

Introduction

This chapter contains introductory material to the RAMP/Final EIS. It includes a description of the planning area and the purpose and need for preparing the RAMP/FEIS. It identifies the issues or concerns addressed in the RAMP/EIS process. Included is a discussion of the RAMP’s relationship to BLM policies, programs, and other plans.

The Planning Area

The Hellgate Recreation Area, also referred to as the planning area or HRA, is located within Josephine County, Oregon and covers approximately 8,000 acres in southwestern Oregon (see Map 1-1). Approximately 70 percent (5,500 acres) is managed by the BLM Medford District Office (see Table 1-1).

The Hellgate Recreation Area, the first 27 miles of the National Wild and Scenic Rogue River, is classified as a recreational river area (see Figure 1-1). A recreational river is defined by Congress as a river that is readily accessible by road or railroad, may have some development on its shoreline, and may have been impounded or diverted in the past. Management of this recreational river area will give primary emphasis to protecting the values that make it outstandingly remarkable, while providing a diversity of river-related recreational opportunities in a developed setting.

In this plan, the Hellgate Recreation Area is divided into two reaches, the Applegate Reach and the Dunn Reach (see Map 1-1). The Applegate Reach begins at the confluence of the Applegate River and ends at Hog Creek. This reach is used primarily by motorized tour boaters and boat and bank anglers. The Dunn Reach begins at Hog Creek and ends at Grave Creek. The Dunn Reach is primarily used for white water rafting; though a small amount of power boat use occurs there.

Purpose and Need

Purpose

The Bureau of Land Management's purpose in preparing this plan is to replace the *1978 Rogue National Wild and Scenic River Activity Plan for the Hellgate Recreation Section* of the Rogue National Wild and Scenic River. The purpose of this plan, the Hellgate Recreation Area Management Plan (RAMP) is to: (1) provide direction and guidance on the management of the Hellgate section pursuant to the Wild and Scenic Rivers Act (Public Law 90-542, October 2, 1968), (2) conform with management direction contained in the *1995 Medford District Record of Decision and Resource Management Plan*, and (3) maintain a mix of river recreation types common to the river since its designation in 1968 as a National Wild and Scenic River.

Need

There has been a substantial increase in river use in the Hellgate Recreation Area since the completion of the current Hellgate section management plan in 1978. There has also been a change in the mix of types of river recreation since 1978. This has resulted in increased conflicts among river users, particularly between jet boaters and floaters during the summer months and between jet boaters and anglers during the fall fishing season. An update of the management plan is needed to insure that river management into the future continues to meet the objectives and requirements of the Wild and Scenic Rivers Act (WSRA), and particularly the protection of the outstandingly remarkable values (ORVs) that led to its congressional designation.

Relationship to Legislation, BLM Policies, Plans, and Programs

In 1968, the United States Congress designated the U.S. Forest Service and the BLM as the lead agencies for managing the land and water within the identified Rogue National Wild and Scenic River corridor (84 miles from its confluence with the Applegate River downstream to the Lobster Creek Bridge). The portion of the river from the mouth of the Applegate River downstream to Marial, a distance of approximately 47 miles, is administered by the BLM, Medford District Office. The lower 37 miles are located within the boundaries of the Siskiyou National Forest and are administered by the U.S. Forest Service.

Management of the Hellgate Recreation Area is guided by numerous legal requirements and by established management direction. Correspondingly, the revision of the recreation area management plan requires that management direction be embodied in the plan.

Legislated Requirements and Management Direction

The *Federal Land Policy and Management Act of 1976* and associated BLM planning regulations (43 CFR 1600, 8351.2) and manuals set forth the process for amending, and tiering to, a resource management plan.

The *National Environmental Policy Act (NEPA) of 1969* and the *Council of Environmental Quality's National Environmental Policy Act* regulations (40 CFR 1500) provide the basic national charter for protection of the environment and analysis of major Federal actions. The NEPA process is the tool used to analyze the proposed actions of the Federal government.

The *Americans with Disabilities Act of 1990 (ADA)* also provides direction for management of the river. This ensures a national mandate to eliminate discrimination against individuals with disabilities. The ADA essentially extends to the private sector the rights and protections already prohibiting discrimination on the basis of disability in federal government and federally-assisted programs, as mandated by the Architectural Barriers Act and Section 504.

The *Archaeological Resources Protection Act of 1979 (ARPA)* provides for the protection of archaeological resources and sites on public lands.

Congress enacted the *Endangered Species Act of 1973 (ESA)* to provide a means whereby the ecosystems, upon which endangered and threatened species depend, may be conserved, and to provide a program for the conservation of such species. Federal land managers and other federal agencies must ensure their activities do not jeopardize the continued existence of listed species or adversely modify habitat critical to those species.

National Wild and Scenic Rivers Act

The *Wild and Scenic Rivers Act of 1968* established the wild and scenic rivers system (Public Laws 90-542 and 99-590). The Wild and Scenic Rivers Act (WSRA) established a method for providing federal protection for certain remaining free-flowing rivers and preserving them and their immediate environments. Rivers are included in the system so they may benefit from the protective management and control of development for which the WSRA provides (USDI 1992b, Appendix 2-WS-2). Listed below are portions of several sections of the WSRA that provide the overall framework for managing the river or provide the guidance for developing and implementing any proposed management action within the river corridor. The entire WSRA is located in Appendix E.

Section 1(b) of the WSRA states:

“It is hereby declared to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geological, fish and wildlife, historic, cultural or other similar values, shall be preserved in a free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations.”

The outstandingly remarkable values for the Rogue River, as identified by Congress (HR 1917 September 24, 1968 and HR 1623 July 3, 1968); as described in the *Master Plan for the Rogue River Component of the National Wild and Scenic Rivers System* (USDI 1969); and as described in the 1972 Plan, the *Rogue National Wild and Scenic River, Oregon: Notice of Revised Development and Management Plan* (Federal Register Vol. 37, No. 131, 13408-13416) include natural scenic qualities along the river, fish, and recreation. Other river-related values that are important, but were not considered outstandingly remarkable at the time include cultural and wildlife resources.

Section 3(b) of the WSRA states:

“Every wild, scenic, or recreational river in its free flowing condition...shall be classified, designated, and administered as one of the following: (1) Wild River Areas – Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail; (2) Scenic River Areas – Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads; and (3) Recreational River Areas – Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

The Hellgate Recreation Area was classified as a recreational river.

Section 7(a) of the WSRA states:

“No department or agency of the United States shall recommend authorization of any water resources project that would have a direct and adverse effect on the values for which such river was established...”

Section 7 of the Wild and Scenic Rivers Act (16 USC 1278) requires a rigorous process to ensure that proposed water resources projects, implemented or assisted by federal agencies within the bed and banks of designated rivers, “do not have a direct and adverse effect” on the values for which the river was designated. Water resources projects include any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act, or other construction of developments which would affect the free-flowing characteristics of a wild and scenic river. In addition to projects licensed by the Federal Energy Regulatory Commission, water resource projects may also include: dams, water diversions, fisheries habitat and watershed restoration/enhancement projects, bridges and other roadway construction/reconstruction projects, bank stabilization, channelization, levees, boat ramps, and fishing piers that occur within the bed and banks of a designated Wild and Scenic River (IWSRCC 1999) and that affect the river’s free-flowing characteristics. These projects include the types of actions along the Rogue National Wild and Scenic River that could come up for decision, including those projects for which the purposes are to improve the free-flowing condition of the river.

The agency designated as river manager must complete a Section 7 determination to assess whether the project proposed, assisted, or permitted by a federal agency would directly and adversely affect the values for which the river was designated. Water resources projects that have a direct and adverse effect on the values of a designated river must either be redesigned and resubmitted for a subsequent Section 7 determination, abandoned, or reported to the Secretary of Interior and the United States Congress, in accordance with the act.

Emergency projects (such as repairing a broken sewer line in or near the river) may temporarily proceed without Section 7 determination. However, a Section 7 determination must be completed in a timely manner upon completion of the project. Emergency water resources projects that are later determined to have a direct and adverse effect on the river values shall be mitigated based on the findings of the Section 7 determination.

Section 10(a) of the WSRA states that:

“Each component of the National Wild and Scenic Rivers System shall be administered in such a manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration, primary emphasis shall be given to protecting its aesthetic, scenic, historic, archaeologic, and scientific

features. Management plans for any such component may establish varying degrees of intensity for its protection and development, based on the special attributes of the area.”

This section is interpreted by the Secretaries of the Interior and Agriculture as meaning that all designated river areas, regardless of classification, will be protected and/or enhanced and not degraded.

The WSRA requires that a comprehensive river management plan be prepared to provide for the protection of the river’s outstandingly remarkable values. The plan is required to address resource protection, development of land and facilities, user capacities, and other management practices as needed.

1972 Comprehensive River Management Plan

In 1972, the U.S. Forest Service and the BLM revised and combined their 1969 *Master Plans for the Rogue River Component of the National Wild and Scenic Rivers System*. The combined plan is the *Rogue National Wild and Scenic River, Oregon: Notice of Revised Development and Management Plan* (1972 Plan) (*Federal Register* Vol. 37, No. 131, 13408-13416). The 1972 Plan provides the basic framework of policies, objectives, and direction for managing the river.

1978 Rogue National Wild and Scenic River Activity Plan for the Hellgate Recreation Section

The 1978 Activity Plan tiers to the *Rogue National Wild and Scenic River, Oregon: Notice of Revised Development and Management Plan* (USDI 1972). The Hellgate RAMP/FEIS will replace the 1978 Plan. The 1978 Plan provides the basic framework of policies, objectives, and direction within which the Hellgate Recreation Section is to be managed.

1995 Medford District Resource Management Plan

The Hellgate RAMP will not amend the *BLM Medford District Record of Decision and Resource Management Plan* (RMP). The Hellgate RAMP is an activity plan in conformance with the BLM Medford District RMP. The following program activity components represent land use allocations or management direction contained in the RMP: (1) activity components not present in the Hellgate Recreation Area, and (2) present activity components with a prescription provided in the RMP.

An amendment determination for the BLM Medford District RMP is not necessary because:

1. These resources are not present in the Hellgate Recreation Area: coal, livestock grazing, wild horse and burro management, and wilderness study areas.
2. These resources have management direction for all land use or specific land use allocations and are managed according to the RMP: survey and manage species, protection buffer species, riparian reserves, late-successional reserves, managed late-successional areas, and matrix allocations.
3. These resources have program direction and are managed according to the RMP: air quality, water and soil, wildlife habitat, fisheries habitat, special status and special attention species habitat, special areas, forest health, recreation, visual resources, cultural resources (including Native American values), timber resources, special forest products, energy and minerals,

socioeconomic conditions, lands, land tenure adjustments, rights-of-way, access, withdrawals, roads, rural interface areas, fire management, noxious weeds, and hazardous materials.

Northwest Forest Plan

The Hellgate RAMP is designed to be compliant with the *Final Supplemental Environmental Impact Statement (FSEIS) on Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl* (USDA, USFS; USDI, BLM 1994).

It also meets the requirements of the Aquatic Conservation Strategy, a component of the Northwest Forest Plan designed to maintain and restore the productivity and resiliency of riparian and aquatic ecosystems.

Noxious Weed Control and Management

The control and management of noxious weeds for all alternatives will be directed by and conform to the Medford District's *Integrated Weed Management Plan and Environmental Assessment* (EA) #OR-110-98-14, tiered to the *Northwest Area Noxious Weed Control Program Environmental Impact Statement* prepared December 1985 and amended March 1987.

Relationship to Other Policies, Plans, and Programs

The land and water resources within the wild and scenic corridor are managed by a host of local, regional, state, and other federal agencies. The agencies would coordinate their activities to assure effective and efficient management and facilitate public understanding and support.

Josephine County

The comprehensive plan for Josephine County has been acknowledged by the Oregon Department of Land Conservation and Development as conforming with the statewide planning goals and objectives. Virtually all the private lands and all of the BLM-administered and state-managed lands within the planning area are in the following county-designated zones: Exclusive Farm and Farm Resource, Forest Commercial and Woodlot Resource, Rural Residential, Tourist Commercial, Wild and Scenic River, Goal 5 Resources (i.e., Open Spaces, Scenic and Historic Areas, and Natural Resources), and Utilities (see Appendix C).

Josephine County Parks Department is a significant contributor of outdoor recreation opportunities within the Hellgate Recreation Area (HRA). The County manages four major developed campgrounds and provides many other recreation opportunities, facilities, and services in the planning area (see Appendix F, Appendix Maps 1 and 2).

Oregon State Scenic Waterways Act

In 1969, the State of Oregon passed the Oregon Scenic Waterways Act (the Oregon Act). This legislation established a program to protect state-designated rivers throughout Oregon. Its goals are

to protect the free-flowing character of designated rivers for fish, wildlife, and recreation. Dams, reservoirs, impoundments, and placer mines are prohibited on state scenic waterways. The Oregon Act requires review of new developments along designated rivers, but does not affect existing water rights, developments, or uses. In 1970, this same 84-mile segment was designated as a component of the Oregon State Scenic Waterways System.

Scenic waterways are administered by the Oregon Parks and Recreation Commission in accordance with Oregon Revised Statutes (ORS) 390.805 to 390.925. Oregon Administrative Rules (OAR) have been adopted to govern the program. General rules set forth generic standards that apply to all scenic waterways. Specific rules are also developed for each river during the management planning process. These rules are designed to manage development within the scenic waterway corridor to maintain the natural beauty of the river.

The Oregon Act and rules require evaluation of proposed land development, improvement, or alteration relative to the scenic and aesthetic beauty of the waterway as viewed from the river. This review and evaluation applies to all related adjacent lands, defined as lands within one-quarter mile of the banks of the scenic waterway. Landowners wishing to build houses or roads, cut timber, mine, or pursue other similar projects, must make written notification to the Oregon Parks and Recreation Department (OPRD). The OPRD reviews the proposal in coordination with other jurisdictions and determines if the proposal will substantially impair the natural beauty of the scenic waterway. When a project is inconsistent with scenic waterway goals, the OPRD works with the landowner to resolve conflicts. The commission has one year from the date of initial notification in which to reach accommodation with the landowner. This may include revising the project or compensating the landowner by purchasing the land or resource or negotiating a scenic easement. If satisfactory resolution is not reached within one year, the landowner may proceed with the initial development proposal.

Local and state agencies must comply with the scenic waterway law and rules. Federal land managing agencies are encouraged to coordinate with the OPRD to insure their own land management actions are compatible with scenic waterway management prescriptions.

Oregon Department of Fish and Wildlife

State of Oregon hunting and fishing regulations, such as bag limits, season-of-use, catch and release, and barbless hooks are the responsibility of the Oregon Department of Fish and Wildlife and will not be addressed in this planning effort.

Oregon Department of Forestry

State of Oregon regulations for regulated-use closures on public land and any commercial forest activity on private lands, such as harvesting or salvaging trees, reforestation, chemical application and pre-commercial thinning are the responsibility of Oregon Department of Forestry and will not be addressed in this planning effort.

Oregon State Marine Board

State of Oregon regulations, such as requirements for personal flotation devices and their accessibility, no anchor zones, pass-through zones, slow no-wake areas, private watercraft noise standards, boat speed, and personal watercraft are the responsibility of the Oregon State Marine Board and will not be addressed in this planning effort.

Oregon State Historic Preservation Office

The Medford District Office will continue to consult with the Oregon State Historic Preservation Office, the Advisory Council on Historic Preservation, tribal governments, and other local and federal agencies as appropriate, regarding the location, evaluation, mitigation, and interpretation of cultural and historic sites within the planning area.

Oregon Coastal Zone Program

The Hellgate Recreation Area is outside the defined coastal zone management area, and a formal coastal zone management plan consistency determination is not required. The proposed Hellgate RAMP is consistent with the Oregon Coastal Zone Program. Although the planning area is outside the zone, the river clearly involves fisheries which are a coastal resource due to the anadromous nature of the fisheries resource.

Oregon Division of State Lands

The Division of State Lands, through its removal/fill permit process for state scenic waterways, regulates fill and removal within the river corridor. These regulations are most notably employed when requests for channel deepening are made (ORS 390.805 to ORS 390.925).

Oregon Department of Environmental Quality

The BLM and Oregon Department of Environmental Quality (ODEQ) have a Memorandum of Agreement that identifies the Medford BLM as a Designated Management Agency charged with implementing and enforcing natural resource management programs for the protection of water quality, as described in the Clean Water Act (P.L. 92-500), on federal lands under its jurisdiction. Under the Agreement, the ODEQ and the Medford BLM work together to bring water quality limited water bodies, as defined under Section 303(d) of the Clean Water Act, on BLM-administered lands into compliance with State water quality standards. This is accomplished by producing and implementing Water Quality Management Plans (WQMP) and Total Maximum Daily Loads (TMDL) for 303(d) listed streams. The scheduled date for completion of the WQMP/TMDL for the Lower Rogue sub-basin is 2004. Regulations and implementation of the Clean Water Act are a responsibility of the DEQ and will not be addressed in this planning effort.

United States Army Corps of Engineers

Section 404 of the Clean Water Act requires the Army Corps of Engineers (ACOE) to regulate, through permit, the discharge of dredged or fill material into waters of the United States, including placement of riprap. The ACOE also regulates, through permits, any structures and work in navigable waters that may affect the river's free-flowing condition.

The United States Army Corps of Engineers manages two dams that affect the flow of water in the Hellgate Recreation Area: the William L. Jess Dam (on the Rogue River) and the Applegate Dam (on the Applegate River). Water releases from these reservoirs are the responsibility of the United States Army Corps of Engineers. These annual water releases will not be addressed in this planning effort.

United States Coast Guard

The U.S. Coast Guard safety regulations for motorized tour boats and their operations, such as inspection of boats, investigation of casualties and accidents, and licensing and certification of boat operators are the responsibility of the U.S. Coast Guard and will not be addressed in this planning effort.

National Marine Fisheries Service

The Secretary of Commerce, acting through the National Marine Fisheries Service (NMFS), has the authority to add to and delete from endangered and threatened marine and anadromous species lists, based on whether a species faces extinction due to a variety of natural or human-caused factors. The Secretary must also establish recovery plans that set forth conservation goals and specify actions necessary to achieve them for each listed species. Listings will not be addressed as part of this planning effort, except to ensure that BLM-managed activities do not jeopardize the continued existence of listed species or adversely modify habitat critical to those species. Additionally, NMFS administers the Magnuson-Stevens Fishery Conservation and Management Act (1996). The Act requires identification of essential fish habitat (EFH) for salmon and to conserve and enhance habitat.

United States Fish and Wildlife Service

The Secretary of the Interior, acting through the United States Fish and Wildlife Service, has the authority to add to and delete from endangered and threatened terrestrial species lists based on whether a species faces extinction due to a variety of natural or human-caused factors. The Secretary must also establish recovery plans that set forth conservation goals and specify actions necessary to achieve them for each listed species. Listings will not be addressed as part of this planning effort, except to ensure that BLM-managed activities do not jeopardize the continued existence of listed species or adversely modify habitat critical to those species.

Endangered Species Act

Management of the Hellgate Recreation Area will comply with species that are ESA listed as threatened or endangered and subsequent recovery plans regardless of when they are adopted.

Management Constraints on Private Lands

Designation of a river under the National Wild and Scenic Rivers Act gives the federal government no authority to zone private lands. Zoning on private lands is solely a matter of state and local regulations. Although the WSRA includes provisions to encourage the protection of ORVs through state and governmental land use planning, these provisions are not binding on local governments. The federal government is responsible for assuring that designated rivers are managed in a manner that meets the intent of the WSRA.

River management plans may prescribe land use or development limitations to protect outstandingly remarkable river values. Many uses may be compatible with a wild, scenic, or recreational classification as long as the rivers are administered to protect and enhance the values that caused them to be included in the national system. Most existing uses and activities on adjoining private lands may continue.

The primary consideration in any river or land use limitation would be the protection and enhancement of a designated river's ORVs. The BLM works closely with landowners to assure that all uses are consistent with the intent of the WSRA. Those uses that clearly threaten identified ORVs are addressed on a case-by-case basis.

Federal guidelines allow different degrees of development along rivers depending on their classification. In consultation with landowners involved, every effort is made to reduce adverse effects to an acceptable level on proposals for major up-grading, realignment, or new construction of roads. Maintenance of existing roads generally do not alter a river's condition and is not restricted.

On the BLM-administered portion of the Rogue River, the BLM has acquired specific development rights, known as scenic easements, for the purpose of protecting the scenic qualities of the designated river area. Additional information about scenic easements can be found in Appendix B.

When the BLM acquires an easement on private land, depending upon its terms and conditions, public access rights may or may not be involved. For example, a scenic easement could involve only the protection of resource values with no provisions for public use. A trail or road easement would involve public use provisions. Any provisions for public use of private lands must be specifically purchased from the landowner. The BLM would work closely with landowners to minimize public use of nonfederal lands through brochures, maps, signs, or other appropriate means, except in locations where rights to such use have been acquired.

River designation does not affect a private landowner's rights to control trespass. Landowners can charge a fee for crossing private lands to fish designated rivers, except where a public access easement exists. The designation of a river into the National Wild and Scenic Rivers System does not change landowner rights unless all or a portion of the rights are acquired from the landowner.

On navigable rivers, the riverbed and banks to the mean high water mark are owned by the state and are available for public use under state laws. Private landowners control public access to their property along the banks of non-navigable rivers. The designation of a river into the National Wild and Scenic Rivers System has no bearing upon its determination of navigability.

Ownership and use of valid water rights are not affected by a federal river designation.

Management Goals, Guidelines, and Standards for the Hellgate Recreation Area

The following management goals, guidelines, and standards constitute the general direction for land and resource management within the planning area (see Appendix B). The goals and standards are applicable to all alternatives (USDI 1995 and I.B. No. OR-90-73).

Management Goals

Management goals are statements that describe a desired condition to be achieved. They are expressed in broad general terms and are timeless in that they have no specific date by which they are to be completed during the planning period. The goals for the Hellgate Recreation Area are:

- Emphasize the protection and enhancement of the outstandingly remarkable values, while providing quality river-related outdoor recreation opportunities (USDI 1992b, Appendix 2-WS-2).

- Provide for diversified recreational opportunities while minimizing conflict between the desires of recreational user groups and their potential effects on other ecological components within or adjacent to the HRA (see Appendix B).
- Emphasize in the Applegate Reach a quality recreation experience for motorized boaters, float anglers, and bank anglers in a setting with higher densities of development on the shorelines due primarily to the amount of private land ownership.
- Emphasize in the Dunn Reach a quality recreation experience for floaters in a setting with lower densities of development on the shorelines due primarily to the amount of public land ownership.
- Emphasize scenic easement objectives to protect the scenic qualities.
- Minimize impacts on state or federally-listed threatened or endangered flora and fauna, cultural resources, Native American religious sites, or historical sites.
- Cooperate with other landowners and regulatory agencies within the HRA.

Management Guidelines and Standards

Management guidelines and standards direct what will and will not occur within the planning area to achieve the desired goals and do not vary by alternative. These multi-resource standards supplement, but do not replace, other direction found in legislation, policies, or management plans. They are designed to comply with applicable State and Federal laws (see Appendix B).

Decisions to be Made

The BLM will ensure the protection and enhancement of the outstandingly remarkable values of the Rogue River pursuant to the Wild and Scenic Rivers Act through implementation of the Proposed Action. Management decisions will be made based on the interdisciplinary analysis contained in this Hellgate RAMP/FEIS.

The Record of Decision and Approved RAMP/EIS would supplement certain sections of the BLM Medford District RMP where the resource management plan deferred site-specific or specific river-related decisions to the RAMP.

The decisions to be considered for the Hellgate RAMP are those that supplement land use allocations or management direction contained in the BLM Medford RMP, detail activity planning decisions that implement the RMP, or are administrative and are used to implement RMP or activity plan decisions.

The RAMP identifies the management actions to be implemented to achieve recreation-related management goals and standards identified in the BLM Medford District RMP. The RAMP does the following:

- 1) Sets forth the direction for administration, development, and protection of recreational use and resources; and
- 2) Identifies specific management actions to be taken.

Specific Management Decisions to be Made

Issues and concerns were identified during several scoping processes (see Chapter 2, Planning Issues) and subsequently analyzed by the BLM. The following lists the issues for which specific management decisions will be made as part of the RAMP. These issues reflect several areas of concern: possible impacts to river resources from visitor use, health and safety, socioeconomic benefits, motorized versus nonmotorized boating, and use limits. The motorized tour boats were identified as a major point of interest among all users of the Hellgate Recreation Area. The common interests of all visitors were the opportunities to view scenery and wildlife, to be in a natural setting, and to enjoy the river.

The degree to which these specific management decisions are carried out depends upon priorities, available personnel, funding levels, and completion of further environmental analysis and decision making, as appropriate. This plan provides a set of decisions outlining management direction and creates a framework for future planning and decision making.

RAMP-related decisions will address each of the following:

All Watercraft Use

- Angling enhancement zones.
- Fall chinook spawning areas.
- Sound sensitive areas.

Private Motorized Boating

- Use levels.
- Season of use.
- Safety sites of concern.
- No-wake zones.
- Erosion sensitive areas.
- Two-way radio communications.

Commercial Motorized Angling

- Season of use.
- Number of permits.
- Permitted trips per day.
- Boat size.
- Safety sites of concern.
- No-wake zones.
- Erosion sensitive areas.
- Two-way radio communications.

Commercial Motorized Tour Boating

- Season of use.
- Number of permits.
- Permitted use levels in the Applegate Reach.
- Permitted use levels in the Dunn Reach.
- Separation time.

- Boat size.
- Notice of display.
- Off plane procedures.
- Daily schedule.
- Daily use window.
- Two-way radio communications.
- Safety sites of concern.
- No-wake zones.
- Thrill power maneuver areas.
- Erosion sensitive areas.

Special Boating Events

- Permitted events.
- Season of use.
- Times of use.
- Permissible areas.

Nonmotorized Floating

- Season of use.
- Use levels.

Nonmotorized Boat Angling

- Season of use.
- Use levels.

Boater Fees and Permits and User Fees

- Permits for commercial watercraft.
- Permits for private watercraft.
- Fees for all watercraft users and vehicle access.

Camping

- Corridor areas open to camping.
- New primitive camp areas.
- Developed camp areas.
- Human waste pack out.
- Campfire requirements.
- Length of stay limits.
- Group size limits.

Day-Use Only Areas

- Primitive day-use only areas.
- Developed day-use only areas.
- Back Country Byways.
- Watchable Wildlife sites.
- Firearm discharge regulations.

Public Access

- Improve and expand existing trails.
- Develop new trails.
- Maintain and improve existing boat ramps.
- Improve undeveloped boat access sites.
- Develop new boat ramps.
- Maintain existing fishing access sites.
- Develop new fishing access sites.
- Designate vehicle access on gravel bar areas.

Visitor Services

- Facilities expansion.

Monitoring

River activities and conditions (resources and social) would be monitored to provide data for use in evaluating the effect of management activities upon the environment in the corridor. Evaluations would measure compliance in achieving the goals and objectives of the Hellgate Recreation Area Management Plan, the effectiveness in protecting and enhancing the outstandingly remarkable values of the river corridor, and the ability to achieve and maintain the standards, objectives, and desired future conditions.

The monitoring plan provides a process by which management accomplishments, trends, and needs for the river corridor are reported and evaluated (see Appendix D).

Analysis Files

All documents and files chronicling the planning process for this activity plan are available for review at the BLM Medford District Office. These documents and files contain information and decisions used in developing the RAMP/FEIS and are referenced at appropriate places in the text.

Chapter 1

Table, Map, and Figure

Table 1-1. Land Ownership within the Yellow River Basin Area

Ownership	Area (km ²)	Percentage (%)
State-owned land	1,200	22
Collective land	4,800	88
Land Private	1,200	22
Land Public	4,800	88
Land of County	1,200	22
Land of Group	4,800	88
Total (km ²)	6,000	100
State-owned land	1,200	22
Collective land	4,800	88
Land Private	1,200	22
Land Public	4,800	88
Land of County	1,200	22
Land of Group	4,800	88
Total (km ²)	6,000	100
TOTAL	6,000	100

Chapter 1

Table, Map, and Figure

- 1. Table
- 2. Map
- 3. Figure

Table

Table 1.1

Monitoring

Monitoring is the process of observing and measuring the performance of a system over time. It involves the collection, analysis, and interpretation of data to identify trends, patterns, and anomalies. Monitoring is essential for understanding the behavior of a system and for making informed decisions about its operation and maintenance.

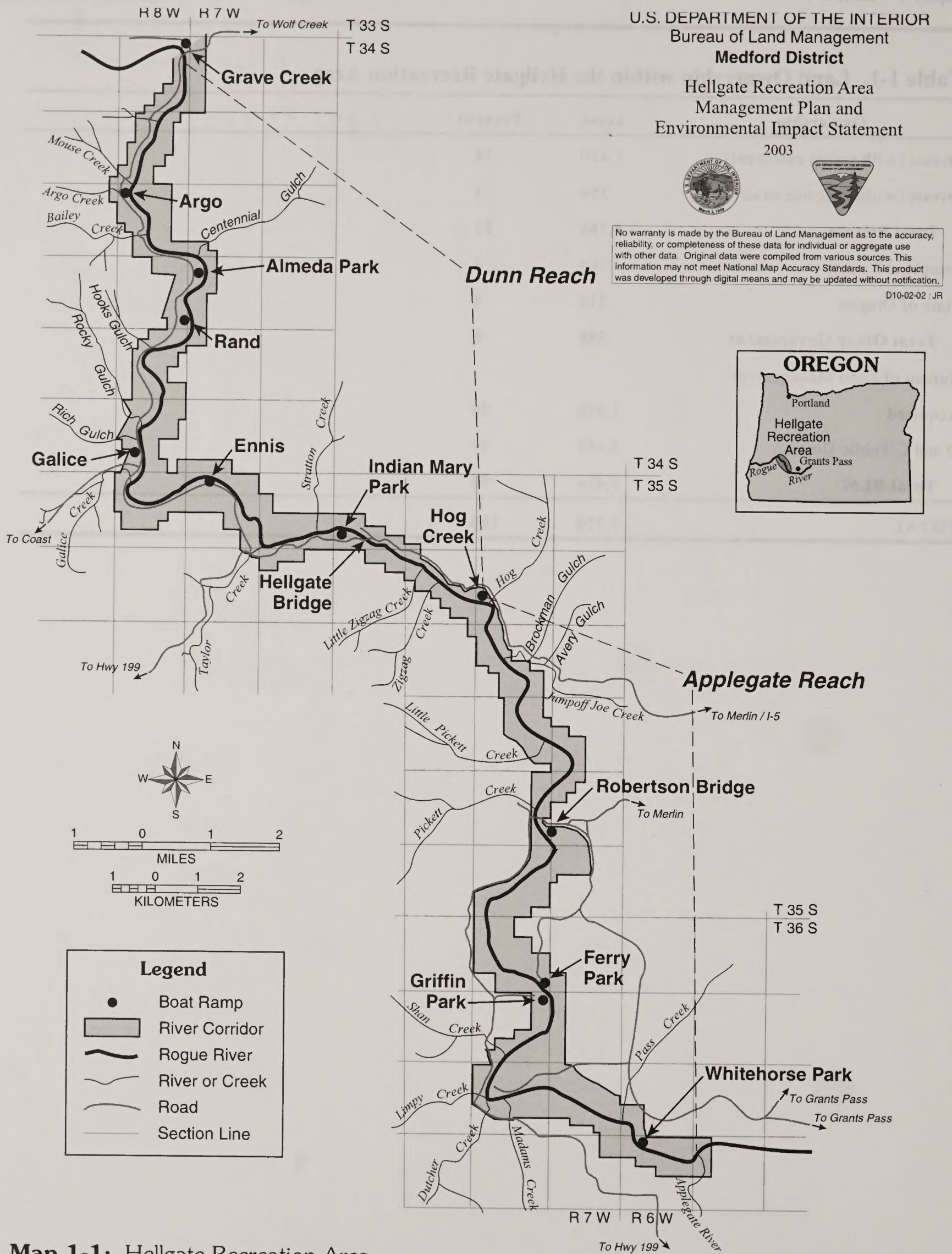
The monitoring process typically involves the following steps:

Analysis Files

Analysis files are used to store and manage data collected during the monitoring process. They typically contain raw data, processed data, and analysis results. Analysis files are essential for conducting detailed analysis and for generating reports and visualizations.

Table 1-1. Land Ownership within the Hellgate Recreation Area

Ownership	Acres	Percent
Private (with scenic easement)	1,410	18
Private (without scenic easement)	354	4
Total Private	1,764	22
Josephine County	284	4
State of Oregon	314	4
Total Other Government	598	8
Bureau of Land Management		
Acquired	1,956	26
O and C/Public Domain	3,458	44
Total BLM	5,414	70
TOTAL	7,776	100



Medford District

Hellgate Recreation Area Management Plan and Environmental Impact Statement

**Figure 1-1. Management Jurisdiction and Motorized Tour Boat (MTB) Operations
from the Mouth of the Rogue River to Gold Ray Dam**

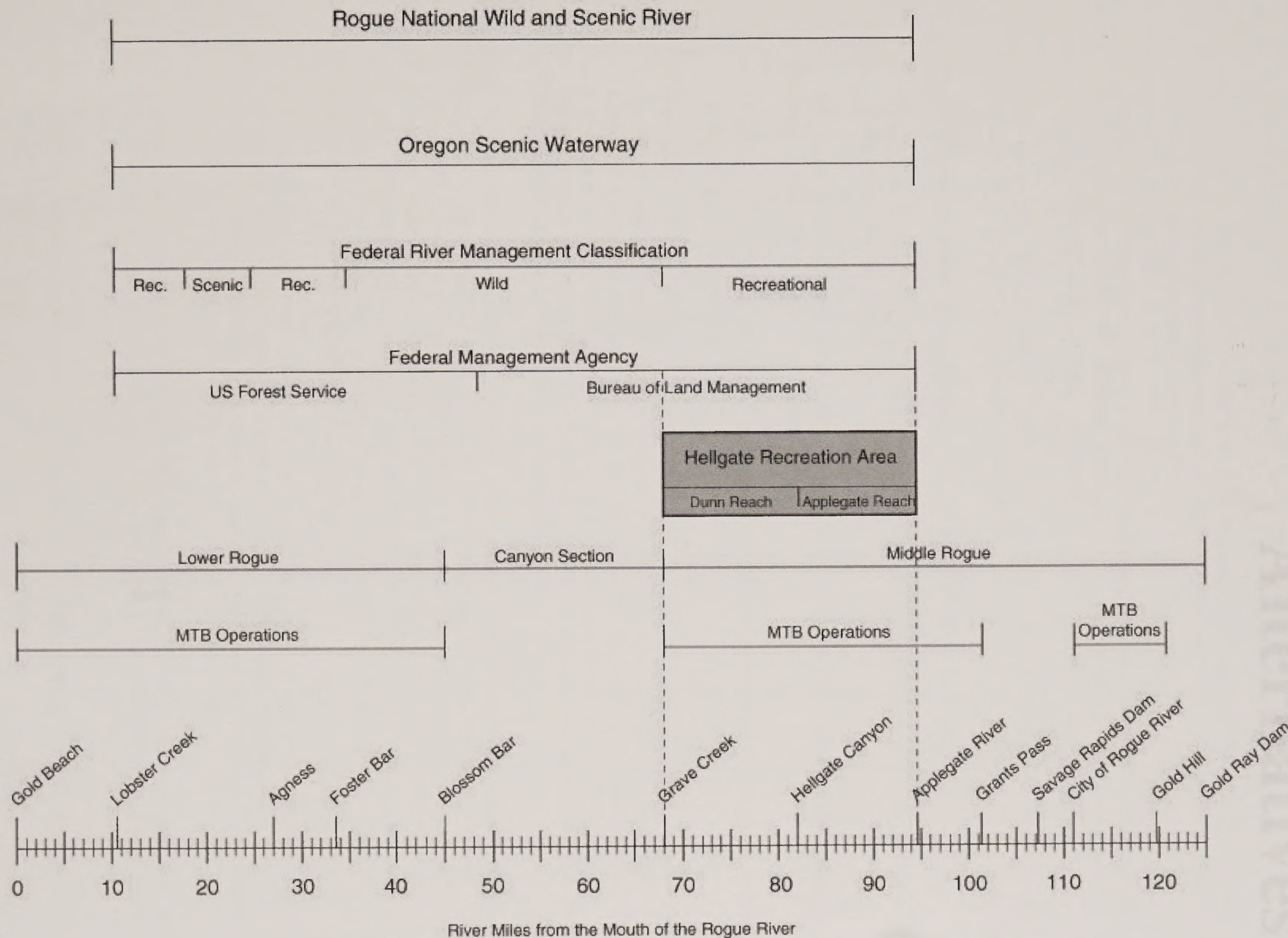


Figure 1-1
 Map of Oregon
 showing the location of the
 study area

Figure 1-1 shows the location of the study area in Oregon. The study area is located in the central part of the state, between the cities of Medford and Grants. The study area is shown in a shaded box on the map.



Chapter 2
Alternatives

Summary of Changes

The following changes were made to Chapter 2 between the Draft and the Final EIS. Minor corrections, explanations, and edits are not included on this list.

The Josephine County Park sites within the Hellgate Recreation Area have been included on camp site, day-use, and boat ramp lists to show the full range of recreation sites. Trails administered by Josephine County Parks have also been included.

Recreation sites have been removed from duplicate categories and have been listed in the primary use category. The word “only” has been added to primitive and developed day-use sites to eliminate duplication in site lists for all alternatives.

The word “new” has been added to the primitive camp area category in all alternatives to show the sites that have been added or deleted by alternative.

Taylor Bar has been removed from the text and maps. It is located on private property.

One primitive day-use only site (Bailey Creek) has been added to the Proposed Action. It was inadvertently left out of the DEIS.

The number of commercial motorized boat angling permits has been corrected from one permit to three in Alternative B and the Proposed Action.

The season of use for commercial motorized boat angling in Alternative B has been corrected from year-round to May 1 to September 30.

The season of use for commercial motorized boat angling in the Proposed Action has been changed in both reaches to reflect the different management emphases in the Applegate and Dunn reaches. The season of use in the Applegate Reach is December 1 through September 30; the objective is to protect active adult fall chinook spawning behavior, redds, and sac-fry. The season of use in the Dunn Reach is September 1 through May 31; the objective is to reduce boating conflict when the high nonmotorized boat use occurs in June through August.

“Limited Off-Highway Vehicle Use Areas” has been eliminated because the intent of these areas was not for all off-highway vehicles, but for vehicles off designated roads in certain areas for river access. The areas listed in the RAMP/DEIS under “Limited Off-Highway Vehicle Use Areas” are now listed under “Vehicle Access on Gravel Bars”. Vehicles are prohibited off of existing roads open to such use, except when parking on gravel bars at five locations: Whitehorse, Griffin Lane Complex, Rocky Bar, Rand, and Argo. The prohibition is pursuant to 43 CFR 8351.2-1, *Federal Register* Vol. 57, No. 110, 1992, 24271-24272.

The “Prohibition-of-Firearm-Discharge Areas” section has been changed to “Firearm Discharge Regulations” for clarity. Under the Proposed Action, the DEIS season of use of June 1 to September 30 for prohibition of firearm discharge has been changed to reflect 43 CFR 8351.2-1, *Federal Register* Vol. 57, No. 110, 1992, 24271-24272.

Flanagan Slough has been removed from the “Watchable Wildlife” list in the Proposed Action and has been added to the “Primitive Day-Use Only” section to protect wildlife habitat and the river environment.

The “Fall Chinook Spawning Areas” listed in the RAMP/DEIS Alternative C has been added to the Proposed Action.

The construction of a new visitor center as addressed in the RAMP/DEIS Preferred Alternative will not be analyzed in this document.

The term “Use Limits” has replaced the term “Carrying Capacity.”

“Special Motorized Boating Events” has been changed to “Special Boating Events” to include the possibility that a special event request could include nonmotorized watercraft. The “Permitted Events” section includes the “New Events” section from the RAMP/DEIS.

The “Vehicle Access Regulated” section of the RAMP/DEIS has been combined with the “User Fees” section.

The “Facilities Location” section has been moved to Chapter 2, “Issues Common to All Alternatives” and renamed “Visitor Center Location.”

“Issues Common to All Alternatives” section has been added.

“Trails” has been moved from Recreational Opportunities and has been added to the “Public Access” section.

Introduction

This chapter describes the range of alternatives including the No Action Alternative (Alternative B) and the BLM’s Proposed Action (Alternative E). The range of alternatives lists different ways the issues could be resolved. The alternatives present different approaches to meeting the needs identified in Chapter 1. The management goals, guidelines, and standards are applicable to all alternatives (see Appendix B).

The 27-mile Hellgate Recreation Area of the Rogue National Wild and Scenic River (from its confluence with the Applegate River to Grave Creek) provides a broad range of land- and water-based recreational opportunities (see Map 1-1). Recreational use of this river segment is managed with a minimum of regulations. Campgrounds, day-use recreation sites, and boat launching facilities are available. Commercial activities regulated by permit are motorized tour boats, guided float trips, and guided fishing trips. Private recreational activities are presently unregulated by the Bureau of Land Management (BLM). The river’s proximity to Medford and Grants Pass, abundant nearby recreation support services (raft rentals and supplies, commercial guide services, shuttles, motels, and restaurants) and a growing public interest in river recreation have led to an increase in visitor use.

Planning Issues

An interdisciplinary team, composed of BLM specialists representing the physical, biological, social, and economic resources found in the planning area, identified the major planning issues found in the Hellgate Recreation Area. Two scoping processes were conducted by the BLM and approximately 3,000 written responses were received from affected federal agencies, state and local governments, and interested organizations and individuals. Through these responses, the major planning issues were refined. All of the recommended planning issues share one topic: the growth of different types of recreation use on the river (see Figures 2-1 and 2-2). How much recreation use can and should the river support? In addition, how many visitors to the river by watercraft can and should the river support?

Issues that have been identified are described below.

Motorized Boating

How should motorized boating (commercial, private, and competitive) be managed (e.g., how many, what type, permitted season, river reach, mix between commercial and private)? Motorized boats are defined as boats with a motor, regardless of the horsepower rating.

The increase in the number of visitors using motorboats, especially motorized tour boats (MTBs), has prompted concerns over conflicts among motorized and nonmotorized floating, boat angling, and landowners (see Figure 2-3). Motorized boating contributes to competition for fishing areas. Many anglers and other users resent the noise, wake, and potential safety problems of motorized boating. The visitor use conflicts are most evident during the hot summer weekends and the fall fishing season. The issue also includes a concern over streambank erosion/deposition as it affects the condition of riparian areas, loss of private land, and possible impacts to sensitive fish species.

Nonmotorized Floating

How should nonmotorized floating be managed (e.g., how much, what kind, permitted season, mix between commercial and private)? Does visitor use by nonmotorized float boat effect sensitive fish species? Nonmotorized floating means watercraft without a motor, such as inflatable rafts, drift boats, and canoes.

The growth of nonmotorized floating has prompted concerns over conflicts among nonmotorized boat floaters and motorized boaters, anglers, and landowners. The social problems are most evident during the hot summer weekends (see Figure 2-3). The number of commercial permittees is not limited in the Hellgate Recreation Area under current management. Visitors to the river by watercraft have the choice of taking a private trip or employing the services of a commercial outfitter.

Nonmotorized Boat Angling

How should a quality nonmotorized boat angling experience be maintained or enhanced (e.g., how much, what kind, permitted season, mix between commercial and private watercraft use)? Nonmotorized boat angling means fishing from a watercraft without a motor, such as inflatable rafts and drift boats.

The nonmotorized boat angling experience issue has four main components: competition for fishing areas, bank versus boat angler conflicts, biological health of fisheries resources, and noise and safety conflicts between nonmotorized boat anglers and motorized boat users (see Figure 2-3). The jet boat or motorized tour boat service was clearly identified by anglers as a major point of controversy.

User Fees for All Users

Should user fees be levied on all visitors using watercraft within the Hellgate Recreation Area of the Rogue River? Should vehicle access fees be implemented? How can fees that are collected be reinvested in on-the-ground management? Should private users pay their share of the cost of management services and facilities provided?

An adequate and stable funding mechanism is essential for resource protection, visitor services, facility development, operation, maintenance, trash collection, and access acquisition. There is increasing pressure for the BLM to obtain a “fair” return for recreation investments and services provided on the public lands. This may in part translate to establishing and/or increasing recreation and user fees to offset the cost of providing and managing recreational services. Implementing vehicle access fees could provide additional opportunities or limit use, thus reducing crowding and its associated behaviors.

Recreational Opportunities

What types of recreational opportunities, facilities, and services should be provided?

Camping

How should the BLM contribute to the developed and undeveloped camping opportunities while protecting river resources? What level and type of developments are appropriate?

Currently there is some degree of competition for campsites in the Hellgate Recreation Area which is expected to increase. This competition is especially intense during the peak use periods when demand exceeds supply. There is the potential for camping activities to impact the physical and biological environments.

Presently, the BLM-administered land from the Applegate River to the Hellgate Recreation Site is a day-use only area. Overnight camping is allowed from the Hellgate Recreation Site to Alameda Park on the right side of the river and from Alameda Park to Grave Creek on both sides of the river, except for private land or land posted as day-use only. Camping is limited to 14 days.

Day-Use Areas

What type of day-use recreational opportunities should be provided? How should the BLM contribute to developed and undeveloped day-use recreational opportunities? Should there be more “Watchable Wildlife” sites?

Day-use activities that occur in the planning area include: fishing, gold panning and dredging, picnicking, sightseeing (driving for pleasure, scenery and wildlife viewing, and photography), sunbathing, boating, swimming, hiking, horseback riding, and hunting.

Public Access

Should the BLM develop a trail system and, if so, should there be multiple use trails? Are additional or improved boat launch and fishing access sites needed?

The limited number and primitive quality of trails within the Hellgate Recreation Area restricts access for recreationists. A trail system to accommodate a broad range of visitors (e.g., hikers, equestrians, anglers, and bicyclists) could be developed, or user-created informal trails could be improved to increase access opportunities to the Hellgate Recreation Area and adjacent public lands. Many of the existing user created or informal trails were primarily developed over the years by visitors seeking river access. Some of these trails would require reconstruction.

Many boat launch and landing sites have crowding problems and visitors exhibiting rude behavior during periods of high use. Improving or developing new boat ramps and fishing access sites, or

implementing access fees could provide additional opportunities or limit use, thus reducing crowding and its associated behaviors.

Visitor Services

How should visitor services be provided? Should there be administrative and/or visitor center sites?

A visitor center (VC) can accommodate a broad range of visitors, including boaters, hikers, recreational miners, sightseers, and picnickers. Visitor services provide educational and tourist information for people interested in the resources available in the Hellgate Recreation Area and the surrounding area. BLM staff provides wild section private permit administration; float equipment inspection; commercial permit administration; river-use education (e.g., river safety, river etiquette, Leave No Trace ethics); information on the area's cultural, Native, and geological history; and information on day-use and camping opportunities.

Issues Common to All Alternatives

The issues common to all alternatives are those determined to have little or no affect on the river resources, or were covered by other guidelines, plans, or laws. These issues address each alternative equally. If another guideline, plan, or law adequately covers the issue, they will be tiered to in this document. Each issue is listed below followed by a description of how it will be addressed in the Hellgate RAMP/FEIS and to what guideline, plan, or law it tiers.

Off-Highway Vehicle Use

Off-highway vehicle (OHV) use is prohibited within the designated river corridor. These vehicles were considered as “inappropriate within the limited boundaries of the National Wild and Scenic River” in the 1978 Activity Plan for the Hellgate Recreation Section. This decision was reaffirmed in the 1995 Medford District BLM Resource Management Plan, where it states that “existing off-highway vehicle closures within the congressionally-designated Rogue National Wild and Scenic River and the Pacific Crest Trail . . . will continue in order to protect their outstandingly remarkable recreational resource values and to meet legislative mandates.”

Vehicle Access

Operation of any motorized vehicle off maintained roads within the designated river corridor is prohibited, except as allowed on certain gravel bars used for parking. This prohibition is described in the 1992 Federal Register Notice listing the prohibited acts within the designated river corridor (*Federal Register* Vol. 57, No. 110, 1992, 24271-24274).

Watercraft Sound

The Oregon State Marine Board regulates sound produced by motorboats. Motorboats are required to have a mechanical means of reducing (muffling) the engine exhaust sound level. No motorboat exhaust sound can exceed 90 dBA, if the boat was manufactured before January 1, 1993, and 88 dBA, if the boat was manufactured after January 1, 1993 (ORS 830.260, OAR 250-10-121). Managing the loudness of sound by limiting the use of decibel levels beyond the State of Oregon standards is not being considered.

Unreasonable noise is prohibited on BLM-administered land and water (*Federal Register* Vol. 57, No. 110, 1992, 24271-24274).

No Anchor and Pass Through Zones and Boat Speed

The Oregon State Marine Board established three no anchor zones and one pass through zone and regulates boat speed within the Hellgate Recreation Area. In the no anchor zones, all watercraft are prohibited from anchoring designated areas, except within 10 feet of the shore, from August 1 through September 30. The pass through zone prohibits any anchoring or positioning that impedes navigation in the designated area from August 1 through September 30 (OAR 250-030-0041).

Motorized boats are required to proceed at a slow, no-wake when passing boat ramps, people working at water level, and Josephine County designated swim areas.

Visitor Center Location

The construction of a new visitor center at a specific location as addressed in the alternatives of the RAMP/DEIS will not be analyzed in this document; however, if the need for a new or expanded visitor center is necessary, project-specific NEPA analysis will address this issue.

Special Recreation Permits

Except as provided in CFR 2932.12, a Special Recreation Permit (SRP) must be obtained for commercial use, including vending associated with recreational use; or competitive use.

If the BLM determines that it is necessary, based on planning decisions, resource concerns, potential user conflicts, or public health and safety, a SRP may be required for: recreational use of special areas; noncommercial, noncompetitive, organized group activities or events; or academic, educational, scientific, or research uses that involve: means of access or activities normally associated with recreation, use of areas where recreation use is allocated, or use of special areas.

Fuels Management

The Grants Pass Resource Area will develop a Fuels Hazard Reduction Plan for the Hellgate Recreation Area.

Alternative Development Process

In considering solutions to the various identified issues in the planning area, a wide range of possibilities exist. Some solutions to the issues could create a more developed environment with higher public use, while other solutions could result in a lower level of development with less public use.

The BLM interdisciplinary team (ID team) of resource specialists considered opinions, comments, and suggestions gathered at internal and public scoping meetings to help define key issues identified in the purpose and need for the action. Alternatives were developed by the ID team to respond to the issues generated by analyzing the need for the action. Alternatives were also submitted by special interest groups for consideration in the alternative development process. The alternatives carried forward for detailed study are designed to address the significant issues surrounding the need for the action.

Alternatives Analyzed in Detail

A description of the range of alternatives, including the BLM's Proposed Action is provided in the following sections. The alternatives are designed to achieve the purpose and need for action, management goals and standards, desired future conditions, and protection and enhancement of the outstandingly remarkable values.

For many years the Hellgate Recreation Area has provided a wide range of recreational opportunities in a generally natural environment. Five alternatives have been developed that continue this general philosophy of management and address the identified issues.

Alternative A: Fewer Watercraft and Less Visitor Use

The goals of Alternative A are to improve and manage natural resource conditions, significantly reduce watercraft use levels, and provide recreational opportunities in a less crowded setting while protecting the environment and the outstandingly remarkable values. The sights, sounds, and overall level of interaction between individuals or groups would be low to moderate. The watercraft use levels would be managed at the level that existed in 1985, before the user conflicts began. No new facilities would be developed. Management of visitor use would occur on-site and off-site through fees, regulations, and limitations. User fees and permits would be required for commercial and private watercraft users and the number of permits would be limited. On-site management and controls would fit into the natural landscape to the greatest degree possible. This alternative reflects a time with less visitor use than exists today. See Tables 2-1 through 2-12 for a summary of the management requirements.

The specific management actions for Alternative A are as follows:

All Watercraft Use (see Table 2-1)

The following management actions would be applicable to all types of visitor use by watercraft, both motorized and nonmotorized.

Angling Enhancement Zones

Angling enhancement zones would not be designated.

Fall Chinook Spawning Areas

Fall chinook spawning areas would not be designated.

Sound Sensitive Areas

Sound sensitive areas would not be designated.

Private Motorized Boating (see Table 2-2)

Use Levels

The maximum daily allocation limit was estimated to be five trips per day during July and August. The limit is equal to the approximate maximum daily private motorized boat trips that occurred in 1985. There are no limits for private motorized boating for the rest of their season of use. The

permits would be authorized daily on a first come, first served basis.

Season of Use

Private motorized boating would be allowed year-round in the Applegate and Dunn reaches.

Safety Sites of Concern

Safety sites of concern would not be designated.

No-Wake Zones

Motorized boats would be required to maintain a slow, no-wake speed when passing boat ramps, people working at water level, and Josephine County designated swim areas (OAR 250-010-0025).

Erosion Sensitive Areas

No specific areas would be designated as erosion sensitive areas.

Two-Way Radio Communication

There would be no two-way radio requirements.

Commercial Motorized Angling (see Table 2-3)

Season of Use

The season of use for commercial motorized anglers would be May 1 through September 30. This season approximates historical use in 1985 (Walker and Austermuehle 1994).

Number of Permits

Permits would be limited to one.

Permitted Trips per Day

An allocation would be set that limits commercial motorized boat angling to two trips per day per permit during the designated season of use. The limit is the approximate maximum daily commercial motorized angling boat trips that occurred in 1985.

Boat Size

Commercial motorized angling boats would be permitted to carry up to six passengers.

Safety Sites of Concern

There would be no specific areas designated as safety sites of concern.

No-Wake Zones

Motorized boats would be required to maintain a slow, no-wake speed when passing boat ramps, people working at water level, and Josephine County designated swim areas (OAR 250-010-0025).

Erosion Sensitive Areas

No specific areas are designated as erosion sensitive areas.

Two-Way Radio Communication

Two-way radios would not be required.

Commercial Motorized Tour Boating (see Table 2-4)

Season of Use

The season of use for motorized tour boats would be May 1 through September 30. This season approximates historical use in 1985 (Walker and Austermuehle 1994).

The objective of the commercial season of use is to protect active adult fall chinook spawning behavior, redds, and sac-fry. Fall chinook spawning in the Hellgate Recreation Area may occur from mid-September to late December. Sac-fry remain in the gravel until late April. The season of use for commercial motorized tour boat traffic was identified because there is a concern that this type of traffic adversely impacts adult fall chinook spawning behavior and kills eggs and sac-fry.

Number of Permits

Four permits would be issued. The limit for the number of permits represents the actual number of MTB operations that occurred in 1985. Two of the four permits would be issued to the present permittees.

The cumulative maximum daily totals for the four motorized tour boat operations would be 12 round trips.

Use Levels

• Applegate Reach

Motorized tour boating would continue. Commercial motorized tour boating would have an allocation or limit equaling a maximum of 12 round trips per day in the Applegate Reach. Twelve round trips per day is the approximate MTB use level in 1985 (Walker and Austermuehle 1994).

The allocations in the Applegate Reach represent an acknowledgment that the primary visitor is the motorized tour boat (MTB) passenger.

• Dunn Reach

Commercial motorized tour boating would be allocated a maximum of eight round trips per day in the Dunn Reach, except on the July 4th holiday and the weekend days in July and August, when it would be four trips per day. The eight-trip allocation could occur any time during the daily times motorized tour boats were allowed in the planning area. The four-trip per day allocation could occur any time during the daily times MTBs are allowed in the planning area.

The allocation in the Dunn Reach is an acknowledgment that the primary watercraft traffic is the nonmotorized float boat.

Separation Time

Motorized tour boat trips would be grouped at the operator's discretion.

Boat Size

One MTB must be less than 43 feet long and 14 feet wide. All other MTBs must be less than 36 feet long and 12 feet 6 inches wide. These boat dimensions represent the characteristics of the MTB fleet in 1985 (Walker and Austermuehle 1994).

Notice of Display

The notice of display on MTBs would be at the discretion of the boat operator. The notice of display is to inform other users of the number and order of MTBs in a group.

Off Plane Procedures

The use of off plane procedures would be at the discretion of the boat operator. The purposes of the off plane procedure are to ensure safe maneuvering in narrow, constricted areas that could be crowded with other watercraft users and to be sensitive to areas of high visitor use.

Daily Schedule

Implementing a daily schedule would be at the operator's discretion.

A daily schedule would inform other users of the approximate times MTBs would be passing certain locations on the river. This knowledge enables the other river users to minimize conflicts with motorized boaters. The MTB permittee(s) would make copies of the daily schedule available to other users and businesses. Schedules should also be available and on display at the primary place(s) of business for the MTB operation.

Daily Use Window

Daily use patterns would be at the operator's discretion.

Two-Way Radio Communication

Two-way radios would not be required for motorized tour boats.

Safety Sites of Concern

There would be no specific areas designated as safety sites of concern.

No-Wake Zones

Motorized boats would be required to maintain a slow, no-wake speed when passing boat ramps, people working at water level, and Josephine County designated swim areas (OAR 250-010-0025).

Thrill Power Maneuver Areas

Thrill power maneuver areas would not be designated. Thrill power maneuvers may be done at any location at the operator's discretion.

Erosion Sensitive Areas

No specific areas would be designated as erosion sensitive areas.

Special Boating Events (see Table 2-5)

Permitted Events

Special boating events would be limited to two. No new events would occur.

Season of Use

The season of use would be limited to the duration of the two special boating events.

Times of Use

The two events (Memorial Day Boatnik, including the marathon jet boat event, and Labor Day boat races) would be limited to two hours per day.

Permissable Areas

Special boating events would be allowed in the Applegate and Dunn reaches.

Nonmotorized Floating (see Table 2-6)

Season of Use

The season of use for nonmotorized floating would be year-round in the Applegate and Dunn reaches.

Use Levels

There would no limit or allocation for the Applegate Reach. A limit to the number of nonmotorized float craft in the Dunn Reach would be set at 120 boat trips per day. The limit would be the approximate maximum daily nonmotorized float trips that occurred in 1985 (Austermuehle 1995).

Nonmotorized Boat Angling (see Table 2-7)

Season of Use

The season of use for nonmotorized boat angling would be year-round in the Applegate and Dunn reaches.

Use Levels

Nonmotorized angling boats would be limited to 30 boat trips per day. The limit would be the approximate maximum daily nonmotorized boat angling trips that occurred in 1985.

Boater Fees and Permits and User Fees (see Table 2-8)

Commercial Watercraft

Special Recreation Permits and fees would be required. The number of permits would be restricted.

Private Watercraft

Permits would be required. The number of permits would be restricted.

User Fees for All Users

User fees would be required for all watercraft users. Vehicle access fees would not be required.

Recreational Opportunities

Camping (see Table 2-9)

• Corridor Areas Open to Camping

The corridor area open to camping on BLM-administered land, unless otherwise identified, would be on both sides of the river from Hellgate Recreation Site to Grave Creek. The corridor area closed to camping on BLM-administered land would be the upstream segment of the Hellgate Recreation Area (from the confluence of the Applegate River with the Rogue River to Hellgate Recreation Site).

• New Primitive Camp Areas

Primitive camping would not be allowed.

• Developed Camp Areas

Eight developed camping areas would be designated.

Developed camping areas would have one or more of the following improvements: parking, toilets, picnic tables, trash cans, or drinking water.

• Human Waste Pack Out

Commercial and private users would be required to pack out human waste when camped at a site where a public restroom is not available.

• Campfires

Fire pans would not be required. Campfire use would be subject to all State of Oregon regulations. Campfires would be allowed in the planning area until the Oregon Department of Forestry declares a regulated use closure. The regulated use closure would normally be in effect during the summer months (see Chapter 3, Wildland Fire Management, Regulated Use Closures).

• Length of Stay Limits

The length of stay on BLM-administered land within the Hellgate Recreation Area would be 14 days per site, unless otherwise posted. Stay lengths may be adjusted to meet resource protection

needs or to create more equitable opportunities for camping at popular sites. Any adjustments would be implemented through signing at the site. Camping would be prohibited in any area posted as closed to that use. Occupying any portion of a developed or undeveloped recreation site for other than recreational purposes would be prohibited, as is occupying a place between 10 p.m. and 6 a.m. that is designated for day-use only.

- **Group Size Limits**

There would be no maximum or limit to the group size per campsite.

Day-Use Only Areas (see Table 2-10)

- **Primitive Day-Use Only Areas**

Thirteen primitive day-use only areas would be designated.

Primitive day-use areas are those sites without improvements for sanitation or visitor comfort.

- **Developed Day-Use Only Areas**

Six developed day-use only areas would be designated.

Developed day-use areas would have one or more of the following improvements: parking, toilets, picnic tables, trash cans, or drinking water.

- **Back Country Byways**

The existing Galice-Hellgate National Back Country Byway would be maintained.

- **Watchable Wildlife Sites**

Three Watchable Wildlife sites would be maintained and one new site would be developed.

- **Firearm Discharge Regulations**

Six areas would be designated as areas where firearms may not be discharged from June 1 through September 15. Hunting would be allowed in the 1/4-mile river corridor within the Hellgate Recreation Area, according to Oregon Department of Fish and Wildlife seasons and regulations.

Discharge of a firearm or any other implement capable of taking human life, causing injury or damaging property would be prohibited at any time within 150 yards of a residence, building, developed or undeveloped recreation site, occupied area or at any time across or on any public road, or across or on any trail or body of water whereby any person or property is exposed to injury or damages as a result of such discharge.

Public Access (see Table 2-11)

- **Improve and Expand Existing Trails**

One existing trail would be improved or expanded.

- **Develop New Trails**

One new trail would be developed.

- **Maintain and Improve Existing Boat Ramps**

Ten boat ramps would be maintained or improved.

- **Improve Undeveloped Boat Access Sites**

One undeveloped boat access site would be improved.

- **Develop New Boat Ramps**

New boat ramps would not be developed.

- **Maintain Existing Fishing Access Sites**

Fishing access sites would not be maintained; however, all developed boat ramps and undeveloped boat access sites may be used as fishing access sites.

- **Develop New Fishing Access Sites**

New fishing access sites would not be developed.

- **Vehicle Access on Gravel Bars**

Two gravel bars would be designated as vehicle access areas.

Visitor Services (see Table 2-12)

- **Facilities Expansion**

Facilities at the Smullin Visitor Center at Rand would be maintained. The range and quality of visitor services currently provided would be maintained and improved.

Alternative B - No Action or Current Management

Alternative B is the “No Action” alternative required by the National Environmental Policy Act and is the baseline to which the other alternatives are compared. The goals of Alternative B are to continue present levels of management while protecting the environment and the outstandingly remarkable values. Special Recreation Permits and fees would be required for commercial watercraft users and the number of commercial nonmotorized outfitters would not be limited. Motorized tour boats SRPs and commercial motorized angling boats SRPs are capped; overall recreation use levels would be unregulated. User fees and permits would not be required. The sights, sounds, and interaction between individuals and groups would be moderate to high. For analysis purposes, the number of watercraft trips is assumed to remain constant through 2006. On-site management and controls would be evident in some areas and lacking in others. See Tables 2-1 through 2-12 for a summary of the management requirements.

The specific management actions for Alternative B are as follows:

All Watercraft Use (see Table 2-1)

The following are specific management actions that would be applicable to all types of visitor use by watercraft, both motorized and nonmotorized.

Angling Enhancement Zones

Angling enhancement zones would not be designated.

Fall Chinook Spawning Areas

Fall chinook spawning areas would not be designated.

Sound Sensitive Areas

Sound sensitive areas would not be designated. Management actions would include an educational outreach effort for private watercraft users and restrictions in permit stipulations for commercial users, including the prohibition of thrill power maneuvers in certain areas.

Private Motorized Boating (see Table 2-2)

Use Levels

Private motorized boating would not be limited.

Season of Use

Private motorized boating would be allowed year-round in the Applegate and Dunn reaches.

Safety Sites of Concern

Safety sites of concern would not be designated.

No-Wake Zones

Motorized boats would be required to proceed at a slow, no-wake when passing boat ramps, people working at water level, and Josephine County designated swim areas (OAR 250-010-0025).

Erosion Sensitive Areas

No erosion sensitive areas would be designated.

Two-Way Radio Communication

The use of two-way radios by visitors using motorized watercraft would be encouraged, but not required. Boating safety is enhanced if the operators of motorized boats have the ability to communicate with each other, especially where topography or vegetation reduces line-of-sight.

Commercial Motorized Boat Angling (see Table 2-3)

Season of Use

The season of use for commercial motorized boat angling would be May 1 to September 30.

Number of Permits

The number of commercial motorized angling permits would remain at three.

Permitted Trips per Day

Commercial motorized angling would be limited to two trips per day for two permits, and two trips per year for the other permit during the designated season of use.

Boat Size

Commercial motorized angling boats would be permitted to carry up to six passengers.

Safety Sites of Concern

Safety sites of concern would not be designated.

No-Wake Zones

Motorized boats would be required to proceed at a slow, no-wake when passing boat ramps, people working at water level, and Josephine County designated swim areas (OAR 250-010-0025).

Erosion Sensitive Areas

No erosion sensitive areas would be designated.

Two-Way Radio Communication

The use of two-way radios by visitors using motorized watercraft would be encouraged, but not required. Boating safety is enhanced if the operators of motorized boats have the ability to communicate with each other, especially where topography or vegetation reduces line-of-sight.

Commercial Motorized Tour Boating (see Table 2-4)

Season of Use

The season of use for MTBs would be May 1 through September 30.

Number of Permits

Permits would be limited to two. Permit transfers would follow the procedures as outlined in the *Commercial Operating Plan for the Hellgate Recreation Section*.

Use Levels

• Applegate Reach

Commercial motorized tour boating would have a limit equaling a maximum of 19 round trips per day in the Applegate Reach.

The allocations in the Applegate Reach represent the acknowledgment that the primary river user is the motorized tour boat passenger (Austermuehle 1995).

• Dunn Reach

Commercial motorized tour boating would be limited to a maximum of 19 round trips per day in the Dunn Reach, except on the weekends and holidays in July and August, when it would be six trips per day.

The six-trip allocation enhances the recreational experience of the nonmotorized float boater during the heavy use days of summer.

The allocation in the Dunn Reach is an acknowledgment that the primary watercraft traffic is the nonmotorized boat (Austermuehle 1995).

- **Separation Time**

MTB trips would be required to travel in groups. Separation times would not be required. There would be a maximum of six groups per day. The objective is to limit encounters with other users.

- **Boat Size**

Two MTBs would be less than 43 feet long and 14 feet wide and all others would be less than 36 feet long and 12 feet 6 inches wide.

- **Notice of Display**

A notice of display would be required for each lead MTB in a group. The notice of display objective is to inform other users of the numbers of MTBs in a group.

- **Off Plane Procedures**

All MTBs would be required to be off plane in Hellgate Canyon.

- **Daily Schedule**

A daily schedule would be submitted annually. Changes to the schedule could be approved as authorized.

- **Daily Use Window**

The daily use window for MTBs in the Hellgate Recreation Area would be 9:00 a.m. to 8:30 p.m. May through August, and 9:30 a.m. to 8:30 p.m. in September.

- **Two-Way Radio Communication**

Motorized tour boats would be required to be equipped with two-way radios. Boating safety is enhanced if the operators of motorized boats have the ability to communicate with each other, especially where topography or vegetation reduces line-of-sight.

- **Safety Sites of Concern**

Safety sites of concern would not be designated.

- **No-Wake Zones**

Motorized boats would be required to proceed at a slow, no-wake when passing boat ramps, people working at water level, and Josephine County designated swim areas (OAR 250-010-0025).

- **Thrill Power Maneuver Areas**

Thrill power maneuver areas would not be designated. Thrill power maneuvers may occur at any location, at the operator's discretion.

- **Erosion Sensitive Areas**

No specific areas would be designated as erosion sensitive areas.

Special Boating Events (see Table 2-5)

Permitted Events

The two current permits would be for the Memorial Day Boatnik (including the marathon jet boat event) and Labor Day boat races. New special boating events would be considered on a case-by-case basis, pending NEPA analysis.

Season of Use

Special boating events would be allowed year-round.

Times of Use

The two current special boating events would have an allocation that limits the duration of the events to two hours per day. River closures may be necessary for visitor safety and to allow other users access to the river. Events that require river closure would be limited to a maximum of two hours per day.

Permissable Areas

Special boating events would be allowed in the Applegate and Dunn reaches.

Nonmotorized Floating (see Table 2-6)

Season of Use

Nonmotorized floating would be allowed year-round in the Applegate and Dunn reaches.

Use Levels

There would be no limit to the number of nonmotorized boats.

Nonmotorized Boat Angling (see Table 2-7)

Season of Use

Nonmotorized boat angling would be allowed year-round in the Applegate and Dunn reaches.

Use Levels

There would be no limit to the number of nonmotorized angling boats.

Boater Fees and Permits and User Fees (see Table 2-8)

Commercial Watercraft

Special Recreation Permits (SRPs) and SRP fees would be required for commercial watercraft.

Private Watercraft

Permits would not be required for private watercraft.

User Fees for All Users

User fees would not be required for commercial or private watercraft users. Fees for vehicle access would not be required.

Recreational Opportunities

Camping (see Table 2-9)

• Corridor Areas Open to Camping

The corridor area open to camping on BLM-administered land, unless otherwise identified, would be on the right bank of the river from Hellgate Recreation Site to Grave Creek, at Rocky Bar, and along the left bank of the river from Alameda Park to Grave Creek. The Applegate Reach would be closed to camping as would the left bank of the river from Hellgate Recreation Site to Alameda Park, excluding Rocky Bar.

• New Primitive Camp Areas

No new primitive camp areas would be designated.

• Developed Camping Areas

Seven developed camp areas would be available.

• Human Waste Pack Out

Human waste pack out methods would be required for commercially-guided river users when camped at a site where a public restroom is not available. Private users would not be required to use a human waste pack out method.

• Campfires

Fire pans would be required. Campfire use would be subject to State of Oregon regulations. Campfires would be allowed in the planning area unless the Oregon Department of Forestry declares a “regulated use closure”.

• Length of Stay Limits

The length of stay on BLM-administered land would be 14 days, unless otherwise posted. Camping would be prohibited in any area posted as closed to that use. Occupying any portion of a developed or undeveloped recreation site for other than recreational purposes would be prohibited.

- **Group Size Limits**

There would be no limits to the maximum group size per campsite on BLM-administered sites.

Day-Use Only Areas (see Table 2-10)

- **Primitive Day-Use Only Areas**

Ten primitive day-use only areas would be designated.

- **Developed Day-Use Only Areas**

Seven developed day-use only areas would be provided.

- **Back Country Byways**

The existing Galice-Hellgate National Back Country Byway would be maintained. No new Back Country Byways would be designated.

- **Watchable Wildlife Sites**

Three Watchable Wildlife sites within the Hellgate Recreation Area would be maintained.

- **Firearm Discharge Regulations**

Hunting would be allowed in the 1/4-mile river corridor within the Hellgate Recreation Area, according to Oregon Department of Fish and Wildlife seasons and regulations. However, the discharge of a firearm or any other implement capable of taking human life, causing injury, or damaging property would be prohibited at any time within 150 yards of a residence, building, developed or undeveloped recreation site, occupied area, or at any time across or on any public road, or across or on any trail or body of water whereby any person or property is exposed to injury or damages as a result of such discharge.

Public Access (see Table 2-11)

- **Improve and Expand Existing Trails**

Existing trails would not be improved or expanded.

- **Develop New Trails**

New trails would not be developed.

- **Maintain and Improve Existing Boat Ramps**

Ten boat ramps would be maintained or improved.

- **Improve Undeveloped Boat Access Sites**

Two undeveloped boat access sites would be improved.

- **Develop New Boat Ramps**

New boat ramps would not be developed.

- **Maintain Existing Fishing Access Sites**

Two fishing access sites would be maintained.

- **Develop New Fishing Access Sites**

Two new fishing access sites would be developed.

- **Vehicle Access on Gravel Bars**

Five gravel bars would be designated as vehicle access areas.

Visitor Services (see Table 2-12)

- **Facilities Expansion**

Facilities at the Smullin Visitor Center at Rand would be maintained and expanded. The range and quality of visitor services currently provided would be maintained and improved.

Alternative C - Angler and Floater Enhancement/More Watercraft and Visitor Use

The goals of Alternative C are to enhance and manage the angling and floating experience while protecting the environment and outstandingly remarkable values. The alternative would be designed to minimize potential impacts to the fisheries resource and increase fishing opportunities while enhancing the fishing experience. This alternative would also maximize floating opportunities and protect the floating experience from the adverse impacts of other users. Facilities to serve the angling and floating public would be developed. User fees and permits would be required for all watercraft users if use limits are reached (an amendment to this plan would occur at that time). Except for commercial motorized tour boats and commercial motorized angling boats, overall recreation use levels would be unregulated and would continue to increase until use limits are reached. Once use limits are reached, an amendment to this plan would occur. The sights, sounds, and interaction between individuals and groups would be moderate to high. See Tables 2-1 through 2-12 for a summary of the management requirements.

The specific management actions for Alternative C are as follows :

All Watercraft Use (see Table 2-1)

The following are specific management actions that are applicable to all types of visitor use by watercraft, both motorized and nonmotorized.

Angling Enhancement Zones

Eight angling enhancement zones would be designated.

Fall Chinook Spawning Areas

Fourteen fall chinook spawning areas would be designated. No motorized use would be allowed in those areas when spawning is occurring. Nonmotorized watercraft would pass around major spawning areas or pass through in the deep part of the channel. Nonmotorized watercraft would not be allowed to stop in spawning areas, if the spawning areas extend across the river. Intrusions

by watercraft and land-based activities into all important fall chinook spawning areas would be discouraged through education.

Sound Sensitive Areas

One 6-mile sound sensitive area would be designated from downstream of Finley Bend to Jumpoff Joe Creek. Management actions would include an educational outreach effort for private watercraft users and restrictions in permit stipulations for commercial users, including the prohibition of thrill power maneuvers in certain areas.

Private Motorized Boating (see Table 2-2)

Use Levels

There would be no limits to the number of private motorized boats. Limits would be established in the future if use limits are reached. Once use limits are reached, an amendment to this plan would occur.

Season of Use

• Applegate Reach

Private motorized boating would be allowed May 1 to September 15 in the Applegate Reach.

• Dunn Reach

Private motorized boating would be allowed year-round in the Dunn Reach, but on a rotational basis during the busy visitor use months of July and August. The rotation would be 4 days on and 10 days off the river throughout July and August. The objectives are to enhance the recreational experience of the nonmotorized float boater during the heavy use days of summer while still providing an opportunity for motorized boating.

Safety Sites of Concern

Safety sites of concern would be designated on an annual basis for all areas on the river where physical conditions create reduced jetboat operational options and could result in accidents or unacceptable close encounters, even when the best operator skill and most prudent judgement is used. Such conditions exist when operators of motorized tour boats do not have a clear line-of-sight and set-down conditions are not met. The objective is to reduce safety risks that are a result of the operator not having information about other river users in unseen channel portions of the river.

No-Wake Zones

Five no-wake zones would be designated in areas of angler concentrations. Motorized boats would be required to proceed at a slow, no-wake when passing boat ramps, people working at water level, Josephine County designated swim areas, erosion sensitive areas, (OAR 250-010-0025), and designated no-wake zones.

Erosion Sensitive Areas

Four erosion sensitive areas would be designated (see Map 2-1). Intrusions by watercraft and land-based activities into these areas would be minimized. Management actions would include education and interim no-wake zones in the four major areas. The effectiveness of erosion sensitive areas would be monitored over a five-year period for their performance in accomplishing objectives.

Two-Way Radio Communications

The use of two-way radios would be encouraged, but not required. Boating safety would be enhanced if the operators of motorized boats have the ability to communicate with each other, especially where topography or vegetation produces line-of-sight restrictions.

Commercial Motorized Boat Angling (see Table 2-3)

Season of Use

The season of use would be May 1 through September 15. The season of use could be extended another two weeks to September 30, providing monitoring indicates no fall chinook spawning is occurring.

Number of Permits

Three permits would be allocated. Those permits not routinely renewed would be eliminated.

Permitted Trips per Day

Commercial motorized boat angling would be limited to two trips per day per permit during the designated season of use.

Boat Size

Commercial motorized angling boats would be permitted to carry up to six passengers.

Safety Sites of Concern

Safety sites of concern would be designated on an annual basis for all areas on the river where physical conditions create reduced jetboat operational options and could result in accidents or unacceptable close encounters, even when the best operator skill and most prudent judgement is used. Such conditions exist when operators of motorized boats do not have a clear line-of-sight and set-down conditions are not met.

No-Wake Zones

Five no-wake zones would be designated in areas of angler concentrations. Motorized boats would be required to proceed at a slow, no-wake when passing boat ramps, people working at water level, Josephine County designated swim areas, erosion sensitive areas (OAR 250-010-0025), and designated no-wake zones.

Erosion Sensitive Areas

Four erosion sensitive areas would be designated (see Map 2-1). Intrusions by watercraft and land-based activities into erosion sensitive areas would be minimized through user education.

Two-Way Radio Communication

The use of two-way radios would be encouraged, but not required, for all visitors using motorized watercraft. Boating safety is enhanced if the operators of motorized boats have the ability to communicate with each other, especially where topography or vegetation reduces line-of-sight restrictions.

Commercial Motorized Tour Boating (see Table 2-4)

Season of Use

The season of use for motorized tour boats would be May 1 through September 15. The season of use could be extended another two weeks to September 30, providing monitoring indicates no fall chinook spawning is occurring.

Number of Permits

Permits would be limited to two. Permit transfers would follow the procedures as outlined in the *Commercial Operating Plan for the Hellgate Recreation Section*.

Use Levels

• Applegate Reach

Commercial motorized tour boating would have a limit of 12 round trips per day in the Applegate Reach.

The allocation in the Applegate Reach represent the acknowledgment that the primary visitor is the motorized tour boat passenger.

• Dunn Reach

Commercial motorized tour boating would be limited to eight round trips per day in the Dunn Reach, except on holidays and weekends in July and August when it would be four trips per day. The eight trips could occur any time during the daily times motorized tour boats are allowed in the planning area.

The four-trip allocation would enhance the recreational experience of the nonmotorized float boater during the heaviest use days of summer. The four trips per day would be allocated to the morning hours. Motorized tour boats would be required to be upstream of the Dunn Reach by noon.

The allocation in the Dunn Reach represents an acknowledgment that the primary watercraft traffic is the nonmotorized float boat.

Separation Time

The trips allowed per day would be required to be organized into 6 or fewer groups of boats. The separation time between boats in a group would average less than two minutes.

Boat Size

The maximum length and width dimensions for all MTBs would be 36 feet long and 12 feet 6 inches wide. Boats currently being used that exceed these dimensions would be phased out over a period of two seasons after the Record of Decision is signed.

Notice of Display

A notice of display would be required on each MTB traveling in a group. Each notice would show the number of boats in the group and that boat's place in the group. The objective is to inform other users of the numbers and order of MTBs in a group.

Off Plane Procedures

MTBs would be required to be off plane in Hellgate Canyon.

Daily Schedule

A daily schedule would be required. Deviations from the permitted schedule would not be authorized. The MTB permittee(s) would make copies of the schedule available to other users and businesses. Schedules would also be available and on display at the primary place(s) of business for the MTB operation.

Daily Use Window

The daily use window for MTBs in the Hellgate Recreation Area would be 10:30 a.m. to 7:00 p.m. from May through September. This daily use window would enhance the landowners' enjoyment of their river property and also enhance angling activities during the early morning prime fishing period.

Two-Way Radio Communication

The use of two-way radios would be required for commercial motorized tour boats. Boating safety would be enhanced if the operators of motorized boats have the ability to communicate with each other, especially where topography or vegetation reduces line-of-sight restrictions.

The BLM Medford District Office and the MTB operators would have mutual use of the licensed MTB radio channel. The purpose would be to augment the effectiveness and efficiency of MTB administration and monitoring.

Safety Sites of Concern

Land or lead spotters would be required when the view and set down conditions are not met.

Safety sites of concern would be designated on an annual basis for all areas on the river where physical conditions create reduced jetboat operational options and could result in accidents or unacceptable close encounters, even when the best operator skill and most prudent judgement is used. Such conditions exist when operators of motorized tour boats do not have a clear line-of-sight and set-down conditions are not met.

No-Wake Zones

Five no-wake zones would be designated in areas of angler concentrations. Motorized boats would be required to proceed at a slow, no-wake when passing boat ramps, people working at water level, Josephine County designated swim areas (OAR 250-010-0025), erosion sensitive areas, and designated no-wake zones.

Thrill Power Maneuver Areas

Thrill power maneuver areas would not be designated and thrill power maneuvers would be prohibited throughout the Hellgate Recreation Area. Thrill power maneuvers would be restricted to enhance neighborhood livability for landowners and to protect soil resources.

Erosion Sensitive Areas

Four erosion sensitive areas would be designated (see Map 2-1). Intrusions by watercraft and land-based activities into erosion sensitive areas would be minimized through user education.

Special Boating Events (see Table 2-5)

Permitted Events

No special boating events would be allowed.

Season of Use

Special boating events would not be allowed in the Hellgate Recreation Area.

Times of Use

Special boating events would not be allowed in the Hellgate Recreation Area.

Permissible Areas

Special boating events would not be allowed in the Hellgate Recreation Area.

Nonmotorized Floating (see Table 2-6)

Season of Use

The season of use for nonmotorized floating would be year-round in the Applegate and Dunn reaches.

Use Levels

A limit for the Hellgate Recreation Area would be set at 500 boat trips per day (number of encounters by floaters) between the two reaches.

Educational outreach would encourage floaters to voluntarily stay off the river during the first three or four hours of daylight during peak fishing periods, especially September through November.

Nonmotorized Boat Angling (see Table 2-7)

Season of Use

Nonmotorized boat angling would be allowed year-round in the Applegate and Dunn reaches.

Use Levels

Use limits would be identified. No limits would be prescribed unless the use limits for nonmotorized boat angling are reached. Once use limits are reached, an amendment to this plan would occur.

Boater Fees and Permits and User Fees (see Table 2-8)

Commercial Watercraft

Special Recreation Permits (SRPs) and SRP fees would be required. A limit to the number of commercial permits would be set if use limits are reached. Once use limits are reached, an amendment to this plan would occur.

Private Watercraft

Permits for private use would be required. Limits to the number of permits would be set if use limits are reached. Once use limits are reached, an amendment to this plan would occur.

User Fees for All Users

User fees would be required for commercial and private watercraft users, if use limits are reached. Vehicle access fees would not be required. Once use limits are reached, an amendment to this plan would occur.

Recreational Opportunities

Camping (see Table 2-9)

• Corridor Areas Open to Camping

The corridor area open to camping on BLM-administered land, unless otherwise identified, would be both sides of the river from Hellgate Recreation Site to Grave Creek. The Applegate Reach and Hellgate Canyon would be closed to camping.

• New Primitive Camping Areas

No new primitive camping areas would be designated.

• Developed Camp Areas

Eighteen developed camping areas would be designated.

• Human Waste Pack Out

Commercial and private users would be required to pack out human waste when camped at a site where a public restroom is not available.

Campfires

Fire pans would be required on all BLM-administered land where fire grates (or equivalent) or developed fire pits are not provided. Campfire use would be subject to State of Oregon regulations.

Length of Stay Limits

Campers would be limited to a length of stay of five days per site during the high summer use season of July and August, unless otherwise posted. Five days was identified as a maximum to allow a wide number of people to use a given site while still allowing a group to occupy a site for an entire holiday weekend. The day limits to camping outside the high summer use season would be 14 days per site, unless otherwise posted.

Group Size Limits

Group size would be limited to 30 people at any gathering area, unless a larger group size is authorized.

Day-Use Only Areas (see Table 2-10)

- **Primitive Day-Use Only Areas**

Eleven primitive day-use only areas would be designated.

- **Developed Day-Use Only Areas**

Six developed day-use only areas would be designated.

- **Back Country Byways**

The Galice-Hellgate National Back Country Byway would be maintained.

- **Watchable Wildlife Sites**

Five Watchable Wildlife sites would be designated.

- **Firearm Discharge Regulations**

Eight areas would be designated as areas where firearms may not be discharged during the high summer visitor use period from June 1 through September 15. Hunting would be allowed in the 1/4-mile river corridor within the Hellgate Recreation Area, according to Oregon Department of Fish and Wildlife seasons and regulations.

Discharge of a firearm or any other implement capable of taking human life, causing injury, or damaging property would be prohibited at any time within 150 yards of a residence, building, developed or undeveloped recreation site, occupied area, or at any time across or on any public road, or across or on any trail or body of water whereby any person or property is exposed to injury or damages as a result of such discharge.

Public Access (see Table 2-11)

- **Improve and Expand Existing Trails**

Four existing trails would be improved.

- **Develop New Trails**

Three new trails would be developed.

- **Maintain and Improve Existing Boat Ramps**

Ten boat ramps would be maintained or improved.

- **Improve Undeveloped Boat Access Sites**

Three undeveloped boat access sites would be improved.

- **Develop New Boat Ramps**

New boat ramps would not be developed.

- **Maintain Existing Fishing Access Sites**

Two fishing access sites would be maintained.

- **Develop New Fishing Access Sites**

Three new fishing access sites would be developed.

- **Vehicle Access on Gravel Bars**

Seven gravel bars would be designated as vehicle access areas.

Visitor Services (see Table 2-12)

- **Facilities Expansion**

Facilities at the Smullin Visitor Center at Rand would be maintained. The range and quality of visitor services currently provided would be maintained and improved.

Alternative D - Maximum Watercraft and Visitor Use

The goals of Alternative D are to maximize and manage the level of recreational use while protecting the environment and the outstandingly remarkable values. The sights, sounds, and interactions with other individuals or groups would often be high. Facilities to enhance recreational opportunities, such as camping, boating, angling, and vehicle-oriented activities, would be developed. On-site management and controls would be obvious, but limited to those necessary for public health and safety as well as to accommodate increased numbers of visitors. Fees would be required for vehicle access to BLM-administered lands. User fees and permits would be required for all watercraft users. The number of commercial outfitters for floating and nonmotorized boat angling would not be limited. Commercial motorized tour boats and commercial motorized angling boats would be regulated, but at a higher level of use than the other alternatives. Overall recreational use levels would continue to increase causing a high degree of interaction between individuals and groups. See Tables 2-1 through 2-12 for a summary of the management requirements.

The specific management actions for Alternative D are as follows:

All Watercraft Use (see Table 2-1)

The following are specific management actions that are applicable to all types of visitor use by both motorized and nonmotorized watercraft.

Angling Enhancement Zones

Angling enhancement zones would be designated to facilitate sharing of fishing holes.

Fall Chinook Spawning Areas

Motorized watercraft would not be allowed in four major spawning areas when fall chinook spawning is occurring. Nonmotorized watercraft would be required to pass around major spawning areas or pass through in the deep part of the channel and not stop in these spawning areas if the area extends across the river. Intrusions into the four major fall chinook spawning areas by nonmotorized watercraft and land-based activities would be discouraged through education.

Sound Sensitive Areas

Sound sensitive areas would not be designated. Management actions would include an educational outreach for visitors by watercraft. The objectives of the sound sensitive area are to minimize sound for all watercraft users and to minimize sound intrusions for residents/landowners and other users.

Private Motorized Boating (see Table 2-2)

Use Levels

Private motorized boating would not be limited.

Season of Use

Private motorized boating would be allowed year-round in the Applegate and Dunn reaches.

Safety Sites of Concern

Safety sites of concern would be designated on an annual basis for all areas on the river where physical conditions create reduced jetboat operational options that could result in accidents or unacceptable close encounters even when the best operator skill and most prudent judgements are used. Such conditions exist when operators of motorized boats do not have a clear line-of-sight and set-down conditions are not met.

No-Wake Zones

Five no-wake zones would be designated at areas of angler concentration. Motorized boats would be required to proceed at a slow, no-wake when passing boat ramps, people working at water level, Josephine County designated swim areas (OAR 250-010-0025), erosion sensitive areas, and designated no-wake zones.

Erosion Sensitive Areas

Two erosion sensitive areas would be designated (see Map 2-1). Management actions would include education and interim no-wake zones in the two major areas. Effectiveness of erosion sensitive areas would be monitored over a five-year period for their performance in accomplishing objectives.

Two-Way Radio Communication

The use of two-way radios would be required for commercial motorized watercraft. Boating safety is enhanced if the operators of motorized boats have the ability to communicate with each other, especially where topography or vegetation reduces line-of-sight restrictions.

Commercial Motorized Boat Angling (see Table 2-3)

Season of Use

The season of use for commercial motorized boat angling would be April 1 through September 15. The season of use could be extended to September 30, providing monitoring indicates there is no spawning in the major spawning areas.

Number of Permits

Thirty permits would be allocated to commercial motorized boat angling.

Permitted Trips per Day

Commercial motorized boat angling would be limited to two trips per day per permit during the designated season of use.

Boat Size

Commercial motorized angling boats would be permitted to carry up to ten passengers.

Safety Sites of Concern

Safety sites of concern would be designated on an annual basis for all areas on the river where physical conditions create reduced jetboat operational options that could result in accidents or unacceptable close encounters even when the best operator skill and most prudent judgements are used. Such conditions exist when operators of motorized boats do not have a clear line-of-sight and set-down conditions are not met.

No-Wake Zones

Five no-wake zones would be designated at areas of angler concentrations. Motorized boats would be required to proceed at a slow, no-wake when passing boat ramps, people working at water level, Josephine County designated swim areas (OAR 250-010-0025), erosion sensitive areas, and designated no-wake zones.

Erosion Sensitive Areas

Two major erosion sensitive areas would be designated. Management actions would include education and interim no-wake zones in the two major areas. The effectiveness of erosion sensitive areas would be monitored over a five-year period for their performance in accomplishing objectives.

Two-Way Radio Communication

The use of two-way radios would be required for all motorized watercraft. Boating safety is enhanced if the operators of motorized boats have the ability to communicate with each other, especially where topography or vegetation reduces line-of-sight restrictions.

Commercial Motorized Tour Boating (see Table 2-4)

Season of Use

The season of use for commercial motorized tour boating would be April 1 through October 31.

Number of Permits

Permits would be limited to four. Permit transfers would follow the procedures as outlined in the *Commercial Operating Plan for the Hellgate Recreation Section*.

Use Levels

• Applegate Reach

Commercial motorized tour boating would have a limit equaling a maximum of 26 round trips per day in the Applegate Reach. The 2 existing permits would be allocated 19 of the 26 round trips per day. The other seven round trips per day would be allocated to the two new permits.

The allocations in the Applegate Reach represent the acknowledgment that the primary visitor is the motorized tour boat passenger.

• Dunn Reach

Commercial motorized tour boating would be allocated a maximum of 16 round trips per day in the Dunn Reach, except on weekends and holidays in July and August, when it would be 8 trips per day.

Eight of the 16 round trips per day would be allocated to the two existing permits. The other eight round trips per day would be allocated to the two new permits. Four of the eight round trips allowed per day on the weekend holidays in July and August would be allocated to the two existing permits. The other four would be allocated to the two new permits.

The allocation in the Dunn Reach represents and acknowledgment that the primary watercraft traffic is the nonmotorized float boat.

Separation Time

The trips allowed per day would be required to be organized into six or fewer groups of boats. The separation time between boats in a group would average less than two minutes apart. The objective is to limit encounters with other users.

Boat Size

Two motorized tour boats up to 43 feet long and 14 feet wide would be allowed. The maximum length and width dimensions for all other MTBs would be 36 feet long and 12 feet 6 inches wide.

Notice of Display

Each MTB traveling in a group would be required to display a notice showing the number of boats in the group and that boat's place in the group. The notice of display objective is to inform other users of the numbers and the order of MTBs in a group.

Off Plane Procedures

All MTBs would be required to be off plane in the Hellgate Canyon.

Daily Schedule

A daily schedule would be required. Changes to an approved schedule could be authorized by the

BLM.

The purpose of a daily schedule is to inform other users of the approximate times MTBs would be passing certain locations on the river. This knowledge enables the other river users to minimize conflicts with motorized boaters. The MTB permittee(s) would make copies of the schedule available to other users and businesses. Schedules would also be available and on display at the primary place(s) of business for the MTB operation.

Daily Use Window

The daily use window for MTBs in the Hellgate Recreation Area would be during the daylight hours of the season of use from April through October.

Two-Way Radio Communication

Two-way radios would be required for all motorized watercraft. Boating safety is enhanced if the operators of motorized boats have the ability to communicate with each other, especially where topography or vegetation reduces line-of-sight restrictions.

The BLM Medford District Office and the MTB operators would have mutual use of the licensed MTB radio channel. The purpose would be to augment the effectiveness and efficiency of MTB administration and monitoring.

Safety Sites of Concern

Land or lead boat spotters would be required when the view and set-down conditions are not met.

Safety sites of concern would be designated on an annual basis for all areas on the river where physical conditions create reduced jetboat operational options that could result in accidents or unacceptable close encounters even when the best operator skill and most prudent judgements are used. Such conditions exist when operators of motorized boats do not have a clear line-of-sight and set-down conditions are not met. The objective is to reduce safety risks that are a result of the operator not having information about other river users in unseen channel portions of the river.

No-Wake Zones

Five no-wake zones would be designated. Motorized boats would be required to proceed at a slow, no-wake when passing boat ramps, people working at water level, Josephine County designated swim areas (OAR 250-010-0025), erosion sensitive areas, and designated no-wake zones.

Thrill Power Maneuver Areas

Some thrill power maneuver areas are identified. These areas would be outside the two erosion sensitive areas.

Erosion Sensitive Areas

Management actions would include education and interim no-wake zones in the two erosion sensitive areas. Effectiveness of erosion sensitive areas would be monitored over a five-year period for their performance in accomplishing objectives.

Special Boating Events (Table 2-5)

Permitted Events

A maximum of five permits would be issued for special boating events. Two permits would be for the Memorial Day Boatnik (including the marathon jet boat event) and the Labor Day boat races. NEPA analysis would be conducted on the three new permits. Additional events would be considered on a case-by-case basis, pending NEPA analysis.

Season of Use

Special boating events would be considered year-round.

Times of Use

Special boating events would not have limits to the time of the event.

Permissible Areas

Boating events would be allowed in the Applegate and Dunn reaches.

Nonmotorized Floating (see Table 2-6)

Season of Use

Nonmotorized floating would be allowed year-round in the Applegate and Dunn reaches.

Use Levels

Use levels would not be limited.

Nonmotorized Boat Angling (see Table 2-7)

Season of Use

Nonmotorized boat angling would be allowed year-round in the Applegate and Dunn reaches.

Use Levels

Use levels would not be limited.

Boater Fees and Permits and User Fees (see Table 2-8)

Commercial Watercraft

Special Recreation Permits (SRPs) and SRP fees would be required.

Private Watercraft

Permits for private use would be required, but there would be no limit to the number of permits.

User Fees for All Users

User fees would be required for commercial and private watercraft users and for vehicle access to BLM-administered lands within the Hellgate Recreation Area.

Recreational Opportunities

Camping (see Table 2-9)

- **Corridor Areas Open to Camping**

The corridor area open to camping on BLM-administered land, unless otherwise identified, would be from Hellgate Canyon to Grave Creek. The corridor area closed to camping on BLM-administered land would be the Applegate Reach and the area from Hog Creek to Hellgate Canyon.

- **New Primitive Camp Areas**

Three new primitive camping areas would be designated.

- **Developed Camp Areas**

Twenty-six developed camping areas would be designated.

- **Human Waste Pack Out**

Commercial and private users would be required to pack out human waste when camped at a site where a public restroom is not available.

- **Campfires**

Fire pans would be required on all BLM-administered land where fire grates (or equivalent) or developed fire pits are not provided. Campfire use would be subject to all State of Oregon regulations.

- **Length of Stay Limits**

Campers would be limited to four days per site during the high summer use season of July and August, unless otherwise posted. Four days was identified as a maximum to allow a wide number of people to use a given site while still allowing a group to occupy a site for an entire holiday weekend. The day limits to camping outside the high summer use season would be 14 days per site, unless otherwise posted.

- **Group Size Limits**

Group size would be limited to 30 people at any gathering area unless a larger group size is authorized.

Day-Use Only Areas (see Table 2-10)

- **Primitive Day-Use Only Areas**

Eight primitive day-use only areas would be designated.

- **Developed Day-Use Only Areas**

Seven developed day-use only areas would be designated.

- **Back Country Byways**

The existing Galice-Hellgate National Back Country Byway would be maintained.

- **Watchable Wildlife Sites**

Six Watchable Wildlife sites would be designated.

- **Firearm Discharge Regulations**

Firearm discharge areas would not be designated. Discharge of firearms would be prohibited year-round in the entire Hellgate Recreation Area.

Public Access (see Table 2-11)

- **Improve and Expand Existing Trails**

Eight existing trails would be improved.

- **Develop New Trails**

Nine new trails would be developed.

- **Maintain and Improve Existing Boat Ramps**

Ten boat ramps would be maintained or improved.

- **Improve Undeveloped Boat Access Sites**

Three undeveloped boat access sites would be improved.

- **Develop New Boat Ramps**

Two new boat ramps would be developed.

- **Maintain Existing Fishing Access Sites**

Two fishing access sites would be maintained.

- **Develop New Fishing Access Sites**

Three new fishing access sites would be developed.

- **Vehicle Access on Gravel Bars**

Ten gravel bars would be designated as vehicle access areas.

Visitor Services (see Table 2-12)

• Facilities Expansion

Facilities at the Smullin Visitor Center at Rand would be maintained. The range and quality of visitor services currently provided would be maintained and improved.

Alternative E - Proposed Action

The goals of Alternative E (Proposed Action) are to manage the level of recreational use while protecting the environment and the outstandingly remarkable values. The sights, sounds, and interactions with other individuals or groups would often be high. The Proposed Action would be designed to minimize potential impacts to the fisheries resource and increase fishing opportunities while enhancing the fishing experience. This alternative would also maximize floating opportunities and protect the floating experience from the adverse impacts of other users. User fees and permits would be required for all watercraft users and the number of permits would be restricted if use limits are reached. Except for commercial motorized tour boats, commercial motorized angling boats, and special boating events, overall recreational use levels would be unregulated and continue to increase until the use limit is reached. Once use limits are reached, an amendment to this plan would occur. See Tables 2-1 through 2-12 for a summary of the management requirements.

The specific management actions for Alternative E are as follows :

All Watercraft Use (see Table 2-1)

The following are specific management actions that would be applicable to all types of visitor use by both motorized and nonmotorized watercraft.

Angling Enhancement Zones

Eight angling enhancement zones would be designated.

Fall Chinook Spawning Areas

Intrusions into fourteen fall chinook spawning areas by watercraft and land-based activities would be discouraged. Watercraft would be encouraged to pass around spawning areas or pass through in the deep part of the channel and not stop in these areas if they extend across the river.

Sound Sensitive Areas

One 4-mile sound sensitive area would be designated from Flanagan Slough to Jumpoff Joe Creek. Management actions would include an educational outreach effort for private watercraft users and restrictions in permit stipulations for commercial users, including the prohibition of thrill power maneuvers in the sound sensitive area before 10:00 a.m. or after 5:00 p.m. The objectives of the sound sensitive area are to minimize sound for all watercraft users and to minimize sound intrusions for residents/landowners and other users.

Private Motorized Boating (see Table 2-2)

Use Levels

Private motorized boating would not be limited; however, limits would be established in the future if private motorized boating causes safety concerns or user conflicts to increase, or visitor satisfaction or fish populations to decrease. Once use limits are reached, an amendment to this plan would occur.

Season of Use

Private motorized boating would be allowed year-round in the Applegate and Dunn reaches.

Safety Sites of Concern

Safety sites of concern would be designated on an annual basis for areas on the river where physical conditions create reduced jetboat operational options that could result in unacceptable close encounters with other watercraft, even when the best operator skill and most prudent judgments are used. Such conditions exist when operators of motorized boats do not have a clear line-of-sight and set-down conditions are not met. The objective is to reduce safety risks that are a result of the operator not having information about other river users in unseen portions of the river.

No-Wake Zones

One no-wake zone would be designated. Motorized boats would be required to proceed at a slow, no-wake when passing boat ramps, people working at water level, Josephine County designated swim areas (OAR 250-010-0025), and selected erosion sensitive areas.

Erosion Sensitive Areas

Four erosion sensitive areas would be designated (see Map 2-1). Intrusions by watercraft and land-based activities into these areas would be minimized. Management actions would include education and interim no-wake zones in the four major areas. A no-wake zone would be designated at Bybee Hole. No-wake operations may not be possible at three other erosion sensitive areas and other actions may be required. The effectiveness of erosion sensitive areas would be monitored over a five-year period for their performance in accomplishing objectives.

Two-Way Radio Communication

The use of two-way radios by visitors using motorized watercraft would be encouraged. Boating safety is enhanced if the operators of motorized boats have the ability to communicate with each other, especially where topography or vegetation reduces line-of-sight.

Commercial Motorized Boat Angling (see Table 2-3)

Season of Use

• Applegate Reach

The season of use for commercial motorized boat angling in the Applegate Reach would be December 1 to September 30, providing monitoring indicates no fall chinook spawning is occurring.

The objective of this season of use is to protect active adult fall chinook spawning behavior, redds, and sac-fry.

• Dunn Reach

The season of use for commercial motorized boat angling in the Dunn Reach would be limited to September 1 to May 31.

The objective of this commercial season of use is to reduce boating conflict when the high nonmotorized boat use occurs in June through August in the Dunn Reach.

Number of Permits

Three commercial motorized boat angling permits would be allocated.

Permitted Trips per Day

Commercial motorized boat angling would be limited to two trips per day for each permit during the designated season of use. One boat per day per permit would be allowed.

Boat Size

Commercial motorized angling boats would be permitted to carry up to six passengers.

Safety Sites of Concern

Safety sites of concern would be designated on an annual basis for areas on the river where physical conditions create reduced jetboat operational options that could result in unacceptable close encounters with other watercraft, even when the best operator skill and most prudent judgments are used. Such conditions exist when operators of motorized boats do not have a clear line-of-sight and set-down conditions are not met. The objective is to reduce safety risks that are a result of the operator not having information about other river users in unseen portions of the river.

No-Wake Zones

One no-wake zone would be designated. Motorized boats would be required to proceed at a slow, no-wake when passing boat ramps, people working at water level, Josephine County designated swim areas (OAR 250-010-0025), at erosion sensitive areas, and at designated no-wake zones.

Erosion Sensitive Areas

Four erosion sensitive areas would be designated (see Map 2-1). Intrusions by watercraft and land-based activities into these areas would be minimized. Management actions would include education and interim no-wake zones in the four major areas. A no-wake zone would be designated at Bybee Hole. No-wake operations may not be possible at three other erosion sensitive areas and other actions may be required. The effectiveness of erosion sensitive areas would be monitored over a five-year period for their performance in accomplishing objectives.

Two-Way Radio Communication

The use of two-way radios by visitors using commercial motorized angling boats would be encouraged. Boating safety is enhanced if the operators of motorized boats have the ability to communicate with each other, especially where topography or vegetation reduces line-of-sight.

Commercial Motorized Tour Boating (see Table 2-4)

Season of Use

The season of use for commercial motorized tour boats is May 1 through September 30. MTB activity would be halted if monitoring indicates there is chinook spawning or pairing behavior in the major spawning areas. The operator would be given a three-day notice before MTB activities are stopped. The BLM Manual 6840 – Special Status Species Policy allows management the option to stop MTBs if fish spawn early.

Number of Permits

Permits would be limited to two. Permit transfers would follow the procedures as outlined in the *Commercial Operating Plan for the Hellgate Recreation Section*.

Use Levels

• Applegate Reach

Commercial motorized tour boating would have a limit equaling a maximum of 19 round trips per day in the Applegate Reach. If monitoring indicates a need to reduce the number of trips, they may be reduced in the future.

The allocations represent an acknowledgment that the primary river user in the Applegate Reach is the motorized tour boat (MTB) passenger.

• Dunn Reach

Commercial motorized tour boating would be allocated a maximum of eight round trips per day in the Dunn Reach, except on weekends and holidays in July and August when the limit would be four trips per day. The four-trip per day allocation would be restricted to the morning hours, so motorized tour boats would be upstream of the Dunn Reach (Hog Creek) by noon.

The allocation in the Dunn Reach is an acknowledgment that the primary watercraft traffic is the nonmotorized float boat.

Separation Time

MTBs would be required to travel in groups. There would be a maximum of six groups per day. Motorized tour boats in a group would average less than two minutes.

Boat Size

One MTB must be less than 43 feet long and 14 feet wide. All other MTBs must be less than 36 feet long and 12 feet 6 inches wide.

Notice of Display

A notice of display would be required for all MTBs traveling in a group. Each notice would show the number of boats in the group and that boat's place in the group. The notice of display objective is to inform other users of the numbers and the order of MTBs in a group.

Off Plane Procedures

All MTBs are required to be off plane in Hellgate Canyon. The purposes of the off plane procedure are to ensure safe maneuvering in narrow, constricted areas that could be crowded with other watercraft users and to be sensitive to high visitor use areas.

Daily Schedule

A daily schedule would be required. Deviations from the permitted schedule would not be authorized.

The purpose of a fixed daily schedule is to inform other users of the approximate times MTBs would be passing certain locations on the river. This knowledge enables the other river users to minimize conflicts with motorized boaters. The MTB permittee(s) would make copies of the schedule available to other users and businesses. Schedules would also be available and on display at the primary place(s) of business for the MTB operation.

Daily Use Window

The daily use window for MTBs in the Hellgate Recreation Area is 9:00 a.m. to 8:30 p.m. May through August 31 and 9:30 a.m. to 8:30 p.m. in September.

The objective of the daily use window is to enhance the landowner's enjoyment of their property and to enhance angling activities during the early morning prime fishing period. The later entry time in September would reduce conflicts with anglers. Angling activity generally occurs earlier in the day whereas float activity occurs later in the morning. The probability for user conflicts between jet boats and float traffic is greatest from May 1 through August 31. Early entry time through August would ease congestion at Hog Creek and downstream points during peak floating times.

Two-Way Radio Communication

Motorized tour boats (MTBs) would be required to be equipped with two-way radios. Boating safety is enhanced if the operators of motorized boats have the ability to communicate with each other, especially where topography or vegetation reduces line-of-sight.

The BLM Medford District Office and the MTB operators would have mutual use of the licensed MTB radio channel. The purpose would be to augment the effectiveness and efficiency of MTB administration and monitoring.

Spotters or lead boats would be required when the view and set down conditions (too shallow or not long enough) are not met. A motorized tour boat cannot be a lead boat if it carries passengers. Two-way radios and spotters reduce chance of encounters, which address blind corners and congestion.

Safety sites of concern would be designated on an annual basis for all areas on the river where physical conditions create reduced jetboat operational options that could result in unacceptable close encounters with other watercraft, even when the best operator skill and most prudent judgments are used. Such conditions exist when operators of motorized boats do not have a clear line-of-sight and set-down conditions are not met. The objective is to reduce safety risks that are a result of the operator not having information about other river users in unseen channel portions of the river.

No-Wake Zones

One no-wake zone would be designated. Motorized boats would be required to proceed at a slow, no-wake when passing boat ramps, people working at water level, Josephine County designated swim areas (OAR 250-010-0025), erosion sensitive areas, and designated no-wake zones.

Thrill Power Maneuver Areas

Thrill power maneuver areas would be identified on an annual basis and modified throughout the season to minimize erosion, noise, and interference with anglers. Areas would be modified, if necessary, throughout the season. Thrill power maneuvers would be permitted in designated areas between 10:00 a.m. and 5:00 p.m.

Erosion Sensitive Areas

A no-wake zone would be designated at Bybee Hole. Three other erosion sensitive areas require further monitoring (see Map 2-1). The effectiveness of erosion sensitive areas would be monitored over a five-year period for its performance in accomplishing objectives.

Special Boating Events (see Table 2-5)

Permitted Events

The two existing permits would continue for the Memorial Day Boatnik (including the marathon jet boat event) and Labor Day boat races.

New events would be considered on a case-by-case basis and would be analyzed through the NEPA process.

Season of Use

Special boating events would be allowed year-round, provided monitoring indicates no fall chinook spawning is occurring.

Times of Use

The two current special boating events would have an allocation that limits the duration of the events to two hours per day. River closures may be necessary for visitor safety and to allow other users access to the river. Events that require river closure would be limited to a maximum of two hours per day.

Permissible Areas

Special boating events would be allowed in the Applegate and Dunn reaches.

Nonmotorized Floating (see Table 2-6)

Season of Use

Nonmotorized floating would be allowed year-round in the Applegate and Dunn reaches.

Use Levels

Nonmotorized floating would not be limited unless monitoring indicates an increase in safety concerns and user conflicts or a decrease in visitor satisfaction. Once use limits are reached, an amendment to this plan would occur.

Nonmotorized Boat Angling (see Table 2-7)

Season of Use

Nonmotorized boat angling would be year-round in the Applegate and the Dunn reaches.

Use Levels

Nonmotorized boat angling would not be limited unless monitoring indicates an increase in safety concerns and user conflicts or a decrease in visitor satisfaction. Once use limits are reached, an amendment to this plan would occur.

Boater Fees and Permits and User Fees (see Table 2-8)

Commercial Watercraft

Special Recreation Permits (SRPs) and SRP fees would be required. There would be a limit to the number of commercial permits in the future if monitoring indicates an increase in safety concerns or user conflicts or a decrease in visitor satisfaction.

Private Watercraft

Permits would not be required at this time, unless use limits are reached. There would be a limit to the number of private permits in the future if monitoring indicates an increase in safety concerns or user conflicts or a decrease in visitor satisfaction. Once use limits are reached, an amendment to this plan would occur.

User Fees for All Users

User fees would not be required for commercial and private watercraft users unless use limits are reached. Once use limits are reached, an amendment to this plan would occur. Vehicle access fees may be required in the future to maintain a quality recreation experience and to provide for visitor safety and facilities maintenance.

Recreational Opportunities

Camping (see Table 2-9)

• Corridor Areas Open to Camping

The corridor area open to camping on BLM-administered land would be the Dunn Reach, from Hog Creek to Grave Creek (both sides of the river), unless otherwise posted. The Applegate Reach would be closed to camping on BLM-administered land.

• New Primitive Camp Areas

Five new primitive camping areas would be designated.

• Developed Camp Areas

Fifteen developed camp areas would be designated.

• Human Waste Pack Out

Commercial and private users would be required to pack out human waste when camped at a site where a public restroom is not available.

• Campfires

Fire pans would be required on all BLM-administered land where fire grates (or equivalent) or developed fire pits are not provided. Campfire use would be subject to all State of Oregon regulations. Campfires would be allowed in the planning area until the Oregon Department of Forestry declares a “regulated use closure”.

- **Length of Stay Limits**

The length of stay on BLM-administered lands within the Dunn Reach would be 14 days per site, unless otherwise posted. Stay lengths may be adjusted to meet resource protection needs or to create more equitable opportunities for camping at popular sites. Any adjustments would be implemented through signing at the site. Camping is prohibited in any area posted as closed to that use. Occupying any portion of a developed or undeveloped recreation site for other than recreational purposes would be prohibited, as is occupying a place between 10 p.m. and 6 a.m. that is designated for day-use only.

- **Group Size Limits**

Group size would be limited to 30 people at any gathering area, unless a larger group size is authorized.

Day-Use Only Areas (see Table 2-10)

- **Primitive Day-Use Only Areas**

Six primitive day-use only areas would be designated.

- **Developed Day-Use Only Areas**

Six developed day-use only areas would be designated.

- **Back Country Byways**

The existing Galice-Hellgate National Back Country Byway would be maintained. No new back country byways would be designated.

- **Watchable Wildlife Sites**

Three Watchable Wildlife sites would be maintained.

- **Firearm Discharge Regulations**

Hunting would be allowed in the 1/4-mile river corridor within the Hellgate Recreation Area, according to Oregon Department of Fish and Wildlife seasons and regulations. However, discharge of a firearm or any other implement capable of taking human life, causing injury, or damaging property is prohibited at any time within 150 yards of a residence, building, developed or undeveloped recreation site, occupied area, or at any time across or on any public road, or across or on any trail or body of water whereby any person or property is exposed to injury or damages as a result of such discharge (*Federal Register* Vol. 57, No. 110, 1992, 24271-24274).

Public Access (see Table 2-11)

- **Improve and Expand Existing Trails**

Five existing trails would be improved and expanded. These trails would be located on both BLM- and Josephine County-administered lands on trails or roads that are presently used.

- **Develop New Trails**

Two new trails would be developed.

- **Maintain and Improve Existing Boat Ramps**

Ten boat ramps would be maintained or improved.

- **Improve Undeveloped Boat Access Sites**

Three undeveloped boat access sites would be improved.

- **Develop New Boat Ramps**

New boat ramps would not be developed.

- **Maintain Existing Fishing Access Sites**

Two fishing access sites would be maintained.

- **Develop New Fishing Access Sites**

One new universally accessible fishing access site would be developed.

- **Vehicle Access on Gravel Bars**

Five gravel bars would be designated as vehicle access areas.

Visitor Services (see Table 2-12)

- **Facilities Expansion**

Facilities at the Smullin Visitor Center at Rand would be maintained and expanded. The range and quality of visitor services currently provided would be maintained and improved.

Alternatives Considered but Eliminated From Detailed Study

Significant information was received from interested groups and individuals, which influenced the development of the range of alternatives. Four groups submitted alternatives they recommended for analysis: Oregon Guides and Packers, Oregon Natural Resources Council, Shan Creek/Galice Citizen Advisory Committee, and Trout Unlimited.

The following are all of the alternative themes considered, but eliminated from further study, including the rationale for elimination.

Oregon Guides and Packers

Summary of Alternative Elements

This alternative would require permits and fees for commercial use only. There would be no limits for commercial use, except for motorized tour boats (MTBs). Private use would not require a permit. The interim MTB permit stipulations (part of Alternative B) would remain in effect and become permanent operating guidelines modified only with respect to MTB size.

Under this alternative, the number and type of visitor services and recreational facilities would in general remain consistent with the level and development in 1993. Current management would allow for the development of up to two additional day-use boat launch areas. Competitive events would continue at the present level.

This alternative would require commercial permittees to be limited to those outfitters permitted in 1993 and those that showed historical use during either the 1991, 1992, or 1993 seasons. Permit transfers by commercial outfitters would be allowed in the future governed by current outfitter permit regulations.

Improvements would be made to the Argo boat landing, including an improved access road; the Grave Creek boat landing, including a new cement ramp; and to the Hog Creek boat landing, including a larger boat ramp area. A new boat launch area would be constructed at Jumpoff Joe Creek.

This alternative would establish a system of unobtrusive signs for boat landings to assist users in recognizing takeout points, as well as a user information program to increase the knowledge of users and to reduce conflicts among users.

BLM Rationale for Elimination of Detailed Consideration

This alternative was eliminated from detailed study because most of the alternative elements are a combination of themes or resulting effects that are similar to Alternatives A through E.

For example, Alternative B does not require permits or fees for private use. Alternatives B, C, and E do not limit commercial outfitter and guide use, except in Alternatives C and E, if use limits are reached. The MTB service is limited to some degree in all alternatives with some form of the interim stipulations applicable for all alternatives, except Alternative A.

The number and type of visitor services and recreational facilities would in general remain close to the 1993 level in Alternatives A and B. Additional boat launch areas are identified for analysis in Alternative D.

Commercial permittees would be limited in Alternative A at the outset and in Alternatives C and E, if use limits are reached. Under all alternatives, permit transfers by commercial outfitters would be allowed in the future.

All alternatives include improving and maintaining existing boat ramps at Rand, Grave Creek, and Hog Creek; and improving undeveloped boat access sites at Argo and Griffin County Park boat ramps.

All alternatives consider different levels of education, which includes signs and user information packages.

Oregon Natural Resources Council

Summary of Alternative Elements

The Oregon Natural Resources Council's (ONRC) alternative stated that BLM was violating an element of the National Environmental Policy Act, which required the BLM to analyze a reasonable range of alternatives. The ONRC felt that motorized tour boats (MTBs) substantially interfered with the recreational and scenic values, which caused the Rogue River to be designated part

of the National Wild and Scenic River System. The ONRC's position was that continuing to allow MTBs on the river violated 16 U.S.C. Section 1281.

The central theme of this alternative was to eliminate MTBs from the planning area. There was no recommendation concerning other components of this alternative.

BLM Rationale for Elimination of Detailed Consideration

The BLM is sensitive to conflicts between motorized and nonmotorized boating. The range of Alternatives A through E all have limits to MTB use in the Hellgate Recreation Area. Congressional records considered recreation values on the Rogue to be outstandingly remarkable. The recreational values included the boating that was occurring at the time it was designated. This boating included both motorized (tour boat operators) and nonmotorized uses (HR. No. 1623 July 3, 1968 and HR No. 1917 September 24, 1968). The annual visitor use split among the three major watercraft users in the Hellgate Recreation Area at the time of the passage of the WSRA was approximately 2,000 anglers, 1,000 floaters, and 9,000 motorized tour boaters (Austermuehle 1995).

The entire elimination of visitor use by MTBs, nonmotorized floaters, or any other recreational use and the probable denial of access to a substantial, diversified, and statistically significant percentage of the total visitor use would be the equivalent of denying or diminishing the recreational ORV.

The alternatives that propose "low" MTB visitor use, Alternatives A and C, use maximum daily MTB trips for the year 1985 (maximum of 12 MTB round trips per day during season of use) because it closely reflected a time before the general controversy over river use allocations began. The objective in establishing the range was to manage the Hellgate Recreation Area, a recreational section, by giving primary emphasis to protecting the values that made it outstandingly remarkable while providing river-related recreational opportunities in a developed setting.

Shan Creek/Galice Citizen Advisory Committee

The Shan Creek/Galice Citizen Advisory Committee (SC/GCAC) (Note: Not a BLM advisory committee) recommended an array of alternatives to be analyzed. They felt there was growing conflict between motorized and nonmotorized recreationists. The committee felt that the development of alternatives to reduce user conflicts must be one of the main purposes of the plan if it is to follow the intent of the Wild and Scenic Rivers Act of 1968.

Summary of Alternative Elements

The SC/GCAC felt the alternatives should provide the use of slower, quieter forms of tour boats. Large rafts with sweeps, which only utilize small hold-back motors, should be encouraged. They felt alternatives should be developed that reduce the numbers and/or routes of MTBs. In addition, they felt that fast, motorized, thrill rides on the river need to be reduced in order to preserve the opportunities for peaceful recreation and enjoyment in the natural environment. Opportunities should be furnished for activities that do not involve extensive use of motors. The committee felt there was little problem with nonmotorized boats encountering other nonmotorized boats or bank recreationists.

The SC/GCAC provided an array of alternatives for consideration by BLM. They used MTB trips per day as the major variable for five alternatives. MTB trips were selected because these boats are generally the fastest and largest type of watercraft on the river and, therefore, were part of some of the greatest user conflicts.

Alternative A reflected the number of MTB trips in 1969, the year after the WSRA was passed and the year the original master plan was developed by BLM for that portion of the wild and scenic river under its administration. The SC/GCAC felt the maximum number of daily round trips for MTBs should be set at two, if the historical number of trips in 1969 could not be established.

Alternative B used the number of trips that occurred in 1985. The advisory committee considered 1985 to be the year user conflicts began. The committee identified the maximum number of daily trips to be nine.

Under Alternative C, the maximum number of trips was 14, roughly equal to 150 percent of trips in 1985, when conflicts began to appear.

Alternative D set the number of MTB round trips to equal the number of trips in 1993 (19 trips), continues the BLM's interim MTB permit stipulations, and includes the elimination of the two largest MTBs.

Alternative E established a total number of 28 short round-trips, roughly 150 percent of the number of trips in Alternative D. The trips occur in restricted routes, which are shortened and separated. No route would have more than 14 trips in a particular and separate route. There could be round trips from Grants Pass to Griffin Park and back and a separate round trip route from Robertson Bridge to Hellgate and back, but no round trips through Brushy Chutes.

In addition to the maximum number of daily MTB trips by alternative, the SC/GCAC felt jet skis should not be allowed, there should be specific wave height requirements for MTBs in certain situations and no-wake zones in certain areas of soil sensitivity, consideration should be given to wildlife sensitive areas, motorized boats should not conduct thrill power maneuvers, MTBs should not be allowed in the Hellgate Recreation Area before 10:30 a.m. and after 7:00 p.m., the entire recreation area should be considered sound sensitive, and the expansion/addition of boat ramps at Robertson Bridge and Hog Creek should be analyzed.

The SC/GCAC also thought motorized boat angling should be restricted, drift boat motors prohibited, patrolling increased, no-wake and low-wake areas should be established, and the size of commercial angling boats should be restricted.

BLM Rationale for Elimination of Detailed Consideration

SC/GCAC's specific organizational recommendations were eliminated from detailed study because most of the alternative elements are similar to those of Alternatives A through E. Two major elements recommended by SC/GCAC were considered: 1) use of 1969 as a base year to determine maximum number of daily MTB round trips, and 2) the design of an alternative that included a maximum of 28 short daily round trips of which not more than 14 could be on the same segment of river and no round trips through Brushy Chutes.

The SC/GCAC and BLM are in agreement concerning the presence of conflicts between motorized and nonmotorized boating. Alternative A reflects a level of boating consistent with the time before the general controversy over use allocations began. Alternative C establishes a season of use (May 1 through September 15) for commercial motorized traffic and for private motorized boats in the Applegate Reach. Alternatives C and E also reduce commercial motorized traffic in the Dunn Reach (where 90 percent of the white water floating occurs) during weekends and holidays in July and August. Thrill maneuvers for MTBs are allowed in Alternatives A and B, prohibited in Alternative C, and allowed in certain areas in Alternatives D and E. Commercial motorized boat angling is limited to a maximum of two round trips per day per permit during the season of use in all alternatives. However, Alternative B has three permits, and the third permit is limited to two trips per year.

The BLM does not consider the Hellgate Recreation Area to be sound sensitive. However, Alternative C includes a 6-mile sound sensitive area and Alternative E a 4-mile area that focuses on the rights and interests of private property owners. The MTB hours of operation in the Hellgate Recreation Area range from Alternative A, which has no restrictions, to Alternative C, which includes limiting MTBs from entering the Hellgate Recreation Area before 10:30 a.m. and remaining after 7:00 p.m. All alternatives, except for Alternative A, would have a comprehensive set of stipulations governing the operation of the MTBs. A range of options is considered concerning the size of the largest MTBs. Alternatives A and E allow one large MTB, Alternative B allows two large MTBs, Alternative C does not allow large MTBs, and Alternative D allows two large MTBs.

The BLM assumptions concerning maximum number of round trips per day for MTBs nearly match SC/GCAC's recommendations. The exception is SC/GCAC's recommendations for an alternative that reflected the maximum number of daily MTB trips, which occurred in 1969 and the design of their Alternative E (28 round trips with the trips occurring in restricted routes, which are shortened and separate).

The SC/GCAC's Alternative A was considered and eliminated from further study. The background to this decision identified there were two MTB operators in 1969 whose combined fleets totaled four MTBs. Their combined maximum daily round trips ranged from 6 to 8 (Walker and Austermuehle 1994). It is noted that visitor use for the three major types of boating use (boat angling, floating, and motorized) had all increased significantly from the time the National Wild and Scenic Rivers Act was passed (see Chapter 3, Visitor Use). For example, there are twice as many boat anglers, ten times as many floaters, and seven times as many visitors by MTBs (Austermuehle 1995). The BLM identified 1985 as its "low" visitor use alternative (BLM's Alternative A) rather than 1969, the year after the Wild and Scenic Rivers Act was passed. The BLM selected 1985 to represent the low visitor use alternative because it closely reflected a time before the user conflicts began. (NOTE: Only one MTB company operated from 1973 to 1985. MTB use more than doubled when two MTB companies began conducting trips out of Grants Pass in 1985. There is no record of conflict prior to 1985. The first written complaint on file concerning MTBs is dated July 12, 1988.) The objective was not to have an alternative that reflected visitor use at the time of passage of the WSRA. An alternative using 1969 levels would significantly reduce the recreational opportunities for boat angling, floating, and motorized tour boating. The objective is to manage the planning area by giving primary emphasis to protecting the values that made it outstandingly remarkable while providing river-related recreational opportunities in a developed setting.

The BLM and the SC/GCAC are in agreement concerning the year 1985 and what it generally represented in terms of visitor use conflicts. There is a disagreement, however, in the number of round trips; SC/GCAC identified the maximum number of round trips by MTBs as 9 and the BLM's information indicated that the maximum number of round trips as 12 (Walker and Austermuehle 1994).

SC/GCAC's Alternative B (12 round trips) fits the BLM's Alternatives A and C. SC/GCAC's Alternatives C and D (14 and 19 round trips) are very close to the BLM's Alternatives B and E (19 round trips). Alternatives A and C provide a similar level of MTB daily use (12 trips) as SC/GCAC's Alternative C (maximum of 14 trips in any segment).

SC/GCAC's Alternative E (28 round trips) is slightly higher, but close to BLM's Alternative D (26 trips). However, SC/GCAC's Alternative E restricts routes that can be used by MTBs. These routes are shorter and separate when compared to those considered in BLM's Alternatives A through E, which are longer and overlap. SC/GCAC envisions that no route would have more than 14 trips. For example, there could be round trips from Grants Pass to Griffin Park and back and another separate round trip route from Robertson Bridge to Hellgate and back, but no round trips through Brushy Chutes. The idea of shorter and separate routes and no MTB boat traffic through the

Brushy Chutes area was considered but eliminated from further analysis because of logistical questions (e.g., traffic congestion at Robertson Bridge Boat Ramp and connecting roads, lower river route too short, provisions for urban services) and a BLM focus through its scenic easement program to encourage MTB support systems to be provided outside the Hellgate Recreation Area. This would decrease the potential for future conflicts between urban support systems established for MTBs in the rural settings of the Hellgate Recreation Area with other visitor-use activities.

Trout Unlimited

Summary of Alternative Elements

The Middle Rogue Steelhead Chapter of Trout Unlimited was primarily concerned with the conservation and preservation of trout, salmon, and steelhead as game fish. Trout Unlimited recommended an alternative that redesigned Alternative C. The Chapter supports Alternative C if eight changes are included in its design and if the Alaska Jet Boat Study indicated no adverse effects from jet boats to spawning areas. The Chapter recommended an elimination of all power boats should the Alaska study confirm its suspicions that jet boats are detrimental to spawning areas.

Trout Unlimited was also concerned about growing safety problems between motorized and nonmotorized traffic.

Summary of Recommended Changes to Alternative C

All changes apply to MTB operations in the Hellgate Recreation Area. The eight changes to Alternative C include:

- Maximum of 10 round trips per day.
- Remove boats longer than 36' by 1995.
- Maximum boat length of 30' for new boats.
- Season of use from May 1 through Labor Day weekend.
- Annual daily schedule required; active BLM monitoring for compliance.
- Boats not allowed after 7:00 p.m.
- Boats off plane at swimming areas.
- Boat operations to cease at an established low water flow.

BLM Rationale for Elimination of Detailed Consideration

Almost all of the elements of Trout Unlimited's recommended alternatives are included in the identified range of the BLM's Alternatives A-E. Its specific organizational recommendations were eliminated from detailed study because most of the alternative elements are similar to elements of Alternatives A-E.

All recommended changes to Alternative C by Trout Unlimited were considered by the BLM. All elements are included in the range of alternatives; some of the specific thresholds or standards were not used and were eliminated from detailed consideration.

The primary management emphasis is to protect and enhance the ORVs while maintaining the recreation experiences available at the time the Rogue River was designated a wild and scenic river. The management goal is to allow for continuation of compatible uses, while providing a wide range of public outdoor recreational opportunities and minimizing conflicts.

The Middle Rogue Steelhead Chapter of Trout Unlimited's primary concern is the conservation and preservation of trout, salmon, and steelhead as game fish. Alternatives C and E establish a season of use that includes monitoring because of a concern about impacts from motorized traffic on spawning areas. The Alaska Jet Boat Study demonstrates an adverse effect to eggs in the gravel from small motorized boats. Commercial motorized activity would be halted if monitoring indicates there is spawning or pairing behavior in the major spawning areas (BLM Manual 6840 – Special Status Species Policy). Alternatives C, D, and E recognize the sensitivity of fall chinook spawning areas.

Alternatives A through E also reduces commercial motorized traffic in the Dunn Reach (where 90 percent of the white water floating occurs) during weekends and holidays in July and August. The restriction is primarily because of social conflicts and safety concerns between floaters and motorized boaters, and it would protect the angling experience during those busy weekends. Alternative C would eliminate the large MTB and all MTBs would be 36' long by 12' 6" wide or smaller. Alternatives A through E provides no-wake zones at boat ramps, near people working at water level, and at Josephine County designated swim areas.

Chapter 2

Tables, Maps, and Figures

Chapter 2
Tables, Maps, and Figures

Table 2-1. Summary and Comparison of Alternatives – All Watercraft Use (Commercial and Private)

All Watercraft Use	Alternative A Fewer watercraft and Less visitor use	Alternative B Current Management No Action	Alternative C Angler and floater enhancement More watercraft and visitor use	Alternative D Maximum watercraft and Visitor use	Alternative E Proposed Action
Angling Enhancement Zones	<ul style="list-style-type: none"> • No zones designated. 	<ul style="list-style-type: none"> • No zones designated. 	<ul style="list-style-type: none"> • Eight zones: <ul style="list-style-type: none"> • confluence of Applegate River • Whitehorse Riffle • Finley Bend • Brushy Chutes • Ferry Hole • Hellgate Canyon • Taylor Creek Gorge • Morrison's Lodge Hole 	<ul style="list-style-type: none"> • Zones would be designated to facilitate sharing of fishing holes. 	<ul style="list-style-type: none"> • Eight zones: <ul style="list-style-type: none"> • confluence of Applegate River • Whitehorse Riffle • Finley Bend • Brushy Chutes • Ferry Hole • Hellgate Canyon • Taylor Creek Gorge • Morrison's Lodge Hole

Table 2-1. Summary and Comparison of Alternatives – All Watercraft Use (Commercial and Private)

All Watercraft Use	Alternative A Fewer watercraft and Less visitor use	Alternative B Current Management No Action	Alternative C Angler and floater enhancement More watercraft and visitor use	Alternative D Maximum watercraft and Visitor use	Alternative E Proposed Action
Fall Chinook Spawning Areas	<ul style="list-style-type: none"> • No areas designated. 	<ul style="list-style-type: none"> • No areas designated. 	<ul style="list-style-type: none"> • Fourteen areas: <ul style="list-style-type: none"> • Applegate Riffle • Whitehorse Riffle • Matson Riffle • Panther Chutes • Wharton Riffle • Brushy Chutes • Lower Banfield Chute • Robertson's Riffle • High Banks Riffle • Peach Orchard Riffle • Pickett Riffle • Weatherby Riffle • Two-Bit Riffle • Jumpoff Joe Riffle • No motorized use when spawning occurs. • Nonmotorized water craft pass around or pass through deepest channel. • Nonmotorized water craft not allowed to stop in spawning areas that extend across the river. • Land-based activities discouraged. 	<ul style="list-style-type: none"> • Four areas: <ul style="list-style-type: none"> • Whitehorse Riffle • Matson Riffle • Panther Chutes • Wharton Riffle. • No motorized use when spawning occurs. • Nonmotorized watercraft pass around or pass through deepest channel. • Nonmotorized water craft not allowed to stop in spawning areas that extend across the river. • Land-based activities discouraged. 	<ul style="list-style-type: none"> • Fourteen areas: <ul style="list-style-type: none"> • Applegate Riffle • Whitehorse Riffle • Finley Bend • Panther Chutes • Wharton Riffle • Brushy Chutes • Lower Banfield Chute • Robertson's Riffle • High Banks Riffle • Pickett Riffle • Peach Orchard Riffle • Weatherby Riffle • Two-Bit Riffle • Jumpoff Joe Riffle. • Water craft encouraged to pass around or pass through deepest channel. • Land-based activities discouraged.

Table 2-1. Summary and Comparison of Alternatives – All Watercraft Use (Commercial and Private)

All Watercraft Use	Alternative A Fewer watercraft and Less visitor use	Alternative B Current Management No Action	Alternative C Angler and floater enhancement More watercraft and visitor use	Alternative D Maximum watercraft and Visitor use	Alternative E Proposed Action
Sound Sensitive Areas	<ul style="list-style-type: none"> • Not designated. 	<ul style="list-style-type: none"> • Not designated. • Minimize sound intrusions for landowners through river user education. 	<ul style="list-style-type: none"> • One 6-mile area from Finley Bend to Jumpoff Joe Creek. • Minimize sound intrusions for landowners through river user education. • No thrill power maneuvers. 	<ul style="list-style-type: none"> • Not designated. • Minimize sound intrusions for landowners through river user education. 	<ul style="list-style-type: none"> • One 4-mile area from Flanagan Slough to Jumpoff Joe Creek. • No thrill power maneuvers before 10:00 am or after 5:00 pm. • Minimize sound intrusions for landowners through river user education.

Table 2-2. Summary and Comparison of Alternatives – Private Motorized Boating

Private Motorized Boating	Alternative A Fewer watercraft and Less visitor use	Alternative B Current Management No Action	Alternative C Angler and floater enhancement/ More watercraft and visitor use	Alternative D Maximum watercraft and Visitor use	Alternative E Proposed Action
Use Levels	• Five trips per day in July and August.	• No limits.	• Limits, if use limits are reached. Once use limits are reached, an amendment to this plan would occur.	• No limits.	• Limits, if use limits are reached. Once use limits are reached, an amendment to this plan would occur.
Season of Use	• Year-round in both reaches.	• Year-round in both reaches.	• Applegate Reach: May 1 - Sept. 15. • Dunn Reach: Year-round. 4 days on river and 10 days off during July and August.	• Year-round in both reaches.	• Year-round in both reaches.
Safety Sites of Concern	• No sites designated.	• No sites designated.	• Designated annually.	• Designated annually.	• Designated annually.
No-Wake Zones	• No-wake at boat ramps, near people working at water level, and Josephine County designated swim areas (OAR 250-010-0025).	• No-wake at boat ramps, near people working at water level, and Josephine County designated swim areas (OAR 250-010-0025).	• Five zones: • Applegate Riffle • Finley Bend • Ferry Hole • Bybee Hole • Brushy Chutes • No-wake at erosion sensitive areas, boat ramps, near people working at water level, and Josephine County designated swim areas (OAR 250-010-0025).	• Five zones: • Applegate Riffle • Finley Bend • Ferry Hole • Bybee Hole • Brushy Chutes • No-wake at erosion sensitive areas, boat ramps, near people working at water level, and Josephine County designated swim areas (OAR 250-010-0025).	• One zone: • Bybee Hole • No-wake at boat ramps, near people working at water level, and Josephine County designated swim areas (OAR 250-010-0025).

Table 2-2. Summary and Comparison of Alternatives – Private Motorized Boating

Private Motorized Boating	Alternative A Fewer watercraft and Less visitor use	Alternative B Current Management No Action	Alternative C Angler and floater enhancement/ More watercraft and visitor use	Alternative D Maximum watercraft and Visitor use	Alternative E Proposed Action
Erosion Sensitive Areas	• No areas designated.	• No areas designated.	• Four areas: • Wharton/Flanagan • Bybee Hole • Little Pickett • Jumpoff Joe	• Two areas: • Little Pickett • Jumpoff Joe	• Four areas: • Wharton/Flanagan • Bybee Hole • Little Pickett • Jumpoff Joe
Two-Way Radio Communication	• No radio requirements.	• Radios encouraged, but not required.	• Radios encouraged, but not required.	• Two-way radios required.	• Radios encouraged, but not required.

Table 2-3. Summary and Comparison of Alternatives – Commercial Motorized Angling

Commercial Motorized Angling	Alternative A Fewer watercraft and Less visitor use	Alternative B Current Management No Action	Alternative C Angler and floater enhancement/ More watercraft and visitor use	Alternative D Maximum watercraft and Visitor use	Alternative E Proposed Action
Season of Use	• May 1 - September 30.	• May 1 - September 30.	• May 1 - September 15.	• April 1 - September 30.	<ul style="list-style-type: none"> • Applegate Reach: Dec. 1 - Sept. 30, if monitoring indicates no fall chinook spawning. • Dunn Reach: Sept. 1 to May 31.
Number of Permits	• One permit.	• Three permits.	• Three permits.	• Thirty permits.	• Three permits.
Permitted Trips per Day	• Two trips per day.	• Two trips per day for two permits. Two trips per year for one permit.	• Two trips per day per permit.	• Two trips per day per permit.	<ul style="list-style-type: none"> • Two trips per day per permit. • One boat per day per permit.
Boat Size	• Carry up to six passengers.	• Carry up to six passengers.	• Carry up to six passengers.	• Carry up to ten passengers.	• Carry up to six passengers.
Safety Sites of Concern	• No sites designated.	• No sites designated.	• Designated annually.	• Designated annually.	• Designated annually.
No-Wake Zones	• No-wake at boat ramps, near people working at water level, and Josephine County designated swim areas (OAR 250-010-0025).	• No-wake at boat ramps, near people working at water level, and Josephine County designated swim areas (OAR 250-010-0025).	<ul style="list-style-type: none"> • Five zones: <ul style="list-style-type: none"> • Bybee Hole • Applegate Riffle • Finley Bend • Brushy Chutes • Ferry Hole • No-wake at erosion sensitive areas, boat ramps, near people working at water level, and Josephine County designated swim areas (OAR 250-010-0025). 	<ul style="list-style-type: none"> • Five zones: <ul style="list-style-type: none"> • Bybee Hole • Applegate Riffle • Finley Bend • Brushy Chutes • Ferry Hole • No-wake at erosion sensitive areas, boat ramps, near people working at water level, and Josephine County designated swim areas (OAR 250-010-0025). 	<ul style="list-style-type: none"> • One zone: <ul style="list-style-type: none"> • Bybee Hole • No-wake at boat ramps, near people working at water level, and Josephine County designated swim areas.

Table 2-3. Summary and Comparison of Alternatives – Commercial Motorized Angling

Commercial Motorized Angling	Alternative A Fewer watercraft and Less visitor use	Alternative B Current Management No Action	Alternative C Angler and floater enhancement/ More watercraft and visitor use	Alternative D Maximum watercraft and Visitor use	Alternative E Proposed Action
Erosion Sensitive Areas	• No areas designated.	• No areas designated.	• Four areas: • Bybee Hole • Wharton/Flanagan • Little Pickett • Jumpoff Joe	• Two areas: • Little Pickett • Jumpoff Joe	• Four areas: • Bybee Hole • Wharton/Flanagan • Little Pickett • Jumpoff Joe
Two-Way Radio Communication	• No radio requirements.	• Two-way radios encouraged, but not required.	• Two-way radios encouraged, but not required.	• Two-way radios required.	• Two-way radios encouraged, but not required.

Table 2-4. Summary and Comparison of Alternatives – Commercial Motorized Tour Boating

Commercial Motorized Tour Boating	Alternative A Fewer watercraft and Less visitor use	Alternative B Current Management No Action	Alternative C Angler and floater enhancement/ More watercraft and visitor use	Alternative D Maximum watercraft and Visitor use	Alternative E Proposed Action
Season of Use	• May 1 - September 30.	• May 1 - September 30.	• May 1 - September 15; extension to Sept. 30, if monitoring indicates no fall chinook spawning.	• April 1 - October 31.	• May 1 - September 30. • Trips would be halted earlier, if monitoring indicates fall chinook spawning is occurring. Permittee would be provided with three days advance notice.
Number of Permits	• Four permits.	• Two permits.	• Two permits.	• Four permits.	• Two permits.
Use Levels	<ul style="list-style-type: none"> • Applegate Reach: 12 round trips per day. • Dunn Reach: Eight round trips per day, except on weekends and holidays in July and August, when it is four. 	<ul style="list-style-type: none"> • Applegate Reach: 19 round trips per day. • Dunn Reach: 19 round trips per day, except on weekends and holidays in July and August, when it is six. 	<ul style="list-style-type: none"> • Applegate Reach: 12 round trips per day. • Dunn Reach: Eight round trips per day, except on weekends and holidays in July and August, when it is four. 	<ul style="list-style-type: none"> • Applegate Reach: 26 round trips per day. • Dunn Reach: 16 round trips per day, except on weekends and holidays in July and August, when it is eight. 	<ul style="list-style-type: none"> • Applegate Reach: 19 round trips per day. • Dunn Reach: Eight round trips per day, except on weekends and holidays in July and August, when it would be four trips before noon. No trips after noon.
Separation Times	• Operator's discretion.	<ul style="list-style-type: none"> • No separation times identified. • Maximum of six groups per day. 	<ul style="list-style-type: none"> • Required to be in groups. • Less than two minute separation time between boats in a group. • Maximum of six groups per day. 	<ul style="list-style-type: none"> • Required to be in groups. • Less than two minute separation time between boats in a group. • Maximum of six groups per day. 	<ul style="list-style-type: none"> • Required to be in groups. • Less than two minute separation time between boats in a group. • Maximum of six groups per day.
Boat Size	<ul style="list-style-type: none"> • One boat ≤ 43'x14'. • Others ≤ 36'x12'6". 	<ul style="list-style-type: none"> • Two boats ≤ 43'x14'. • Others ≤ 36'x12'6". 	• All boats ≤ 36'x12'6".	<ul style="list-style-type: none"> • Two boats ≤ 43'x14'. • Others ≤ 36'x12'6". 	<ul style="list-style-type: none"> • One boat ≤ 43'x14'. • Others ≤ 36'x12'6".

Table 2-4. Summary and Comparison of Alternatives – Commercial Motorized Tour Boating

Commercial Motorized Tour Boating	Alternative A Fewer watercraft and Less visitor use	Alternative B Current Management No Action	Alternative C Angler and floater enhancement/ More watercraft and visitor use	Alternative D Maximum watercraft and Visitor use	Alternative E Proposed Action
Notice of Display	• Operator's discretion.	• Required for lead MTB in a group.	• Required for each MTB in a group.	• Required for each MTB in a group.	• Required for each MTB in a group.
Off Plane Procedures	• Operator's discretion.	• Required in Hellgate Canyon.	• Required in Hellgate Canyon.	• Required in Hellgate Canyon.	• Required in Hellgate Canyon.
Daily Schedule	• Operator's discretion.	• Required annually. • Changes may be authorized.	• Required annually. • Changes not authorized.	• Required annually. • Changes may be authorized.	• Required annually. • Changes not authorized.
Daily Use Window	• Operator's discretion.	• 9:00 am to 8:30 pm, May - August. • 9:30 am to 8:30 pm, September.	• 10:30 am to 7:00 pm, May - September.	• Daylight hours.	• 9:00 am to 8:30 pm, May - August. • 9:30 am to 8:30 pm, September.
Two-way Radio Communication	• Not required.	• Required.	• Required. • BLM and MTBs have mutual use of MTB radio channel.	• Required. • BLM and MTBs have mutual use of MTB radio channel.	• Required. • BLM and MTBs have mutual use of MTB radio channel.
Safety Sites of Concern	• No sites designated.	• No sites designated.	• Designated annually. • Land or lead boat spotters required.	• Designated annually. • Land or lead boat spotters required.	• Designated annually. • Land or lead boat spotters required.

Table 2-4. Summary and Comparison of Alternatives – Commercial Motorized Tour Boating

Commercial Motorized Tour Boating	Alternative A Fewer watercraft and Less visitor use	Alternative B Current Management No Action	Alternative C Angler and floater enhancement/ More watercraft and visitor use	Alternative D Maximum watercraft and Visitor use	Alternative E Proposed Action
No-Wake Zones	<ul style="list-style-type: none"> No-wake at boat ramps, near people working at water level, and at Josephine County designated swim areas. 	<ul style="list-style-type: none"> No-wake at boat ramps, near people working at water level, and at Josephine County designated swim areas. 	<ul style="list-style-type: none"> Five zones: <ul style="list-style-type: none"> Applegate Riffle Finley Bend Ferry Hole Bybee Hole Brushy Chutes No-wake at erosion sensitive areas, boat ramps, near people working at water level, and at Josephine County designated swim areas. 	<ul style="list-style-type: none"> Five zones: <ul style="list-style-type: none"> Applegate Riffle Finley Bend Ferry Hole Bybee Hole Brushy Chutes No-wake at erosion sensitive areas, boat ramps, near people working at water level, and at Josephine County designated swim areas. 	<ul style="list-style-type: none"> One zone: <ul style="list-style-type: none"> Bybee Hole No-wake at boat ramps, near people working at water level, and at Josephine County designated swim areas.
Thrill Power Maneuver Areas	<ul style="list-style-type: none"> No areas designated. May be done at any location at operator's discretion. 	<ul style="list-style-type: none"> No areas designated. May be done at any location at operator's discretion. 	<ul style="list-style-type: none"> Thrill power maneuvers not allowed. 	<ul style="list-style-type: none"> Some areas identified outside the two major erosion sensitive areas. 	<ul style="list-style-type: none"> Areas identified on an annual basis. Maneuvers only allowed from 10:00 am 5:00 pm.
Erosion Sensitive Areas	<ul style="list-style-type: none"> No areas designated. 	<ul style="list-style-type: none"> No areas designated. 	<ul style="list-style-type: none"> Four areas: <ul style="list-style-type: none"> Wharton/Flanagan Bybee Hole Little Pickett Jumpoff Joe 	<ul style="list-style-type: none"> Two areas: <ul style="list-style-type: none"> Little Pickett Jumpoff Joe. 	<ul style="list-style-type: none"> Four areas: <ul style="list-style-type: none"> Wharton/Flanagan Bybee Hole Little Pickett Jumpoff Joe

Table 2-5. Summary and Comparison of Alternatives – Special Boating Events

Special Boating Events	Alternative A Fewer watercraft and Less visitor use	Alternative B Current Management/ No Action	Alternative C Angler and floater enhancement/ More watercraft and visitor use	Alternative D Maximum watercraft and Visitor use	Alternative E Proposed Action
Permitted Events	<ul style="list-style-type: none"> • Two events: <ul style="list-style-type: none"> • Boatnik • Labor Day • No new events. 	<ul style="list-style-type: none"> • Two events: <ul style="list-style-type: none"> • Boatnik • Labor Day • New events considered on a case-by-case basis, pending NEPA analysis. 	<ul style="list-style-type: none"> • No events. • No new events. 	<ul style="list-style-type: none"> • Five events: <ul style="list-style-type: none"> • Boatnik • Labor Day • New events considered on a case-by-case basis, pending NEPA analysis. 	<ul style="list-style-type: none"> • Two events: <ul style="list-style-type: none"> • Boatnik • Labor Day • New events considered on a case-by-case basis, pending NEPA analysis.
Season of Use	<ul style="list-style-type: none"> • Limited to the duration of the special boating events. 	<ul style="list-style-type: none"> • Year-round. 	<ul style="list-style-type: none"> • Not allowed in HRA. 	<ul style="list-style-type: none"> • Year-round. 	<ul style="list-style-type: none"> • Year-round.
Times of Use	<ul style="list-style-type: none"> • Two hours per day for current permitted events. 	<ul style="list-style-type: none"> • Two hours per day for current permitted events. • River closures for new events, if necessary, would be limited to a maximum of two hours per day. 	<ul style="list-style-type: none"> • Not allowed in HRA. 	<ul style="list-style-type: none"> • No limits. 	<ul style="list-style-type: none"> • Two hours per day for current permitted events. • River closures for new events, if necessary, would be limited to a maximum of two hours per day.
Permissible Areas	<ul style="list-style-type: none"> • Applegate and Dunn reaches. 	<ul style="list-style-type: none"> • Applegate and Dunn reaches. 	<ul style="list-style-type: none"> • Not allowed in HRA. 	<ul style="list-style-type: none"> • Applegate and Dunn reaches. 	<ul style="list-style-type: none"> • Applegate and Dunn reaches.

Table 2-6. Summary and Comparison of Alternatives – Nonmotorized Floating

Nonmotorized Floating	Alternative A Fewer watercraft and Less visitor use	Alternative B Current Management/ No Action	Alternative C Angler and floater enhancement/ More watercraft and visitor use	Alternative D Maximum watercraft and Visitor use	Alternative E Proposed Action
Season of Use	• Year-round in both reaches.	• Year-round in both reaches.	• Year-round in both reaches.	• Year-round in both reaches.	• Year-round in both reaches.
Use Levels	<ul style="list-style-type: none"> • No limits in the Applegate Reach. • Limit set at 120 boat trips per day in the Dunn Reach. 	• No limits.	• Limit set at 500 boat trips per day.	• No limits.	• Restricted, if use limits are reached. Once use limits are reached, an amendment to this plan would occur.

Table 2-7. Summary and Comparison of Alternatives – Nonmotorized Boat Angling

Nonmotorized Boat Angling	Alternative A Fewer watercraft and Less visitor use	Alternative B Current Management/ No Action	Alternative C Angler and floater enhancement/ More watercraft and visitor use	Alternative D Maximum watercraft and Visitor use	Alternative E Proposed Action
Season of Use	• Year-round in both reaches.	• Year-round in both reaches.	• Year-round in both reaches.	• Year-round in both reaches.	• Year-round in both reaches.
Use Levels	• Limit set at 30 boat trips per day.	• No limits.	• Restricted, if use limits are reached. Once use limits are reached, an amendment to this plan would occur.	• No limits.	• Restricted, if use limits are reached. Once use limits are reached, an amendment to this plan would occur.

Table 2-8. Summary and Comparison of Alternatives – Boater Fees and Permits and User Fees

Boater Fees and Permits and User Fees	Alternative A Fewer watercraft and Less visitor use	Alternative B Current Management/ No Action	Alternative C Angler and floater enhancement/ More watercraft and visitor use	Alternative D Maximum watercraft and Visitor use	Alternative E Proposed Action
Commercial Watercraft	<ul style="list-style-type: none"> • Special Recreation Permits and SRP fees required. • Number of permits restricted. 	<ul style="list-style-type: none"> • Special Recreation Permits and SRP fees required. 	<ul style="list-style-type: none"> • Special Recreation Permits and SRP fees required. • Number of permits restricted, if use limits are reached. Once use limits are reached, an amendment to this plan would occur. 	<ul style="list-style-type: none"> • Special Recreation Permits and SRP fees required. 	<ul style="list-style-type: none"> • Special Recreation Permits and SRP fees required. • Number of permits restricted, if use limits are reached. Once use limits are reached, an amendment to this plan would occur.
Private Watercraft	<ul style="list-style-type: none"> • Permits required. • Number of permits restricted. 	<ul style="list-style-type: none"> • Permits not required. 	<ul style="list-style-type: none"> • Permits required. • Number of permits restricted, if use limits are reached. Once use limits are reached, an amendment to this plan would occur. 	<ul style="list-style-type: none"> • Permits required. 	<ul style="list-style-type: none"> • Permits required, if use limits are reached. • Number of permits restricted, if use limits are reached. • Once use limits are reached, an amendment to this plan would occur.

Table 2-8. Summary and Comparison of Alternatives – Boater Fees and Permits and User Fees

Boater Fees and Permits and User Fees	Alternative A Fewer watercraft and Less visitor use	Alternative B Current Management/ No Action	Alternative C Angler and floater enhancement/ More watercraft and visitor use	Alternative D Maximum watercraft and Visitor use	Alternative E Proposed Action
User Fees for All Users	<ul style="list-style-type: none"> • Fees required for commercial watercraft users. • Fees required for private watercraft users. • Fees not required for vehicle access. 	<ul style="list-style-type: none"> • Fees not required for commercial watercraft users. • Fees not required for private watercraft users. • Fees not required for vehicle access. 	<ul style="list-style-type: none"> • Fees required for commercial watercraft users, if use limits are reached. • Fees required for private watercraft users, if use limits are reached. • Once use limits are reached, an amendment to this plan would occur. • Fees not required for vehicle access. 	<ul style="list-style-type: none"> • Fees required for commercial watercraft users. • Fees required for private watercraft users. • Fees required for vehicle access. 	<ul style="list-style-type: none"> • Fees required for commercial watercraft users, if use limits are reached. • Fees required for private watercraft users, if use limits are reached. • Fees required for vehicle access, if needed to address use limits or deferred maintenance needs. • Once use limits are reached, an amendment to this plan would occur.

Table 2-9. Summary and Comparison of Alternatives – Recreational Opportunities/Camping

Camping	Alternative A Fewer watercraft and Less visitor use	Alternative B Current Management/ No Action	Alternative C Angler and floater enhancement/ More watercraft and visitor use	Alternative D Maximum watercraft and Visitor use	Alternative E Proposed Action
Corridor Areas Open	<ul style="list-style-type: none"> • Hellgate Recreation Site to Grave Creek. 	<ul style="list-style-type: none"> • Hellgate Recreation Site to Grave Creek - right bank. • Rocky Bar. • Alameda Park to Grave Creek - left bank. 	<ul style="list-style-type: none"> • Hellgate Recreation Site to Grave Creek. 	<ul style="list-style-type: none"> • Hellgate Canyon to Grave Creek. 	<ul style="list-style-type: none"> • Dunn Reach (Hog Creek to Grave Creek).
New Primitive Camp Areas	<ul style="list-style-type: none"> • None. 	<ul style="list-style-type: none"> • No new areas. 	<ul style="list-style-type: none"> • No new areas. 	<ul style="list-style-type: none"> • Three areas: <ul style="list-style-type: none"> • North Zigzag Creek • Dunn • Lower Dunn 	<ul style="list-style-type: none"> • Five areas: <ul style="list-style-type: none"> • Hellgate Beach • North Zigzag Creek • Zigzag Creek • Dunn • Lower Dunn
Developed Camp Areas	<ul style="list-style-type: none"> • Eight areas: <ul style="list-style-type: none"> • Whitehorse County Park • Griffin County Park • Lower Hellgate • Indian Mary County Park • Ennis County Park • Robert Dean (float-in) • Alameda County Park • Argo 	<ul style="list-style-type: none"> • Seven areas: <ul style="list-style-type: none"> • Whitehorse County Park • Griffin County Park • Indian Mary County Park • Ennis County Park • Robert Dean (float-in) • Alameda County Park • Argo 	<ul style="list-style-type: none"> • Eighteen areas: <ul style="list-style-type: none"> • Whitehorse County Park • Griffin County Park • Griffin Lane Complex • Hussey Lane • Hellgate Recreation Site • Indian Mary County Park • Indian Mary County Park Extension • Paint Creek (float-in) • Upper Ennis (float-in) • Ennis County Park 	<ul style="list-style-type: none"> • Twenty-six areas: <ul style="list-style-type: none"> • Whitehorse County Park • Sloan Hayfield • Griffin County Park • Griffin Lane Complex • Ferry Road River Front • Flanagan Slough (float-in) • Robertson Bridge Peach Orchard • Hussey Lane • Jumpoff Joe • North Zigzag • Hellgate Bridge • Hellgate Beach 	<ul style="list-style-type: none"> • Fifteen areas: <ul style="list-style-type: none"> • Whitehorse County Park • Griffin County Park • Lower Hellgate • Indian Mary County Park • Indian Mary County Park Extension • Paint Creek (float-in) • Stratton Creek (float-in) • Upper Ennis (float-in) • Ennis County Park • Rocky Bar • Robert Dean

Table 2-9. Summary and Comparison of Alternatives – Recreational Opportunities/Camping

Camping	Alternative A Fewer watercraft and Less visitor use	Alternative B Current Management/ No Action	Alternative C Angler and floater enhancement/ More watercraft and visitor use	Alternative D Maximum watercraft and Visitor use	Alternative E Proposed Action
			<ul style="list-style-type: none"> • Rocky Bar • Robert Dean (float-in) • Chair • Rand • Alameda County Park • Alameda Mine • Argo • Upper Grave Creek 	<ul style="list-style-type: none"> • Hellgate Recreation Site • Indian Mary County Park • Stratton Creek (float-in) • Paint Creek (float-in) • Upper Ennis (float-in) • Ennis County Park • Rocky Bar • Robert Dean (float-in) • Chair • Rand • Alameda County Park • Alameda Mine • Argo • Upper Grave Creek 	<ul style="list-style-type: none"> (float-in) • Chair • Rand • Alameda County Park • Argo
Human Waste Pack-Out	<ul style="list-style-type: none"> • Required for all users. 	<ul style="list-style-type: none"> • Required for commercial users only. 	<ul style="list-style-type: none"> • Required for all users. 	<ul style="list-style-type: none"> • Required for all users. 	<ul style="list-style-type: none"> • Required for all users.
Campfires	<ul style="list-style-type: none"> • Fire pans not required. • State regulations. 	<ul style="list-style-type: none"> • Fire pans required. • State regulations. 	<ul style="list-style-type: none"> • Fire pans required. • State regulations. 	<ul style="list-style-type: none"> • Fire pans required. • State regulations. 	<ul style="list-style-type: none"> • Fire pans required. • State regulations.
Length of Stay Limits	<ul style="list-style-type: none"> • 14 days per site, unless otherwise posted. 	<ul style="list-style-type: none"> • 14 days per site, unless otherwise posted. 	<ul style="list-style-type: none"> • Five days per site in July and August, unless otherwise posted. 	<ul style="list-style-type: none"> • Four days per site in July and August, unless otherwise posted. 	<ul style="list-style-type: none"> • 14 days per site, unless otherwise posted.

Table 2-9. Summary and Comparison of Alternatives – Recreational Opportunities/Camping

Camping	Alternative A Fewer watercraft and Less visitor use	Alternative B Current Management/ No Action	Alternative C Angler and floater enhancement/ More watercraft and visitor use	Alternative D Maximum watercraft and Visitor use	Alternative E Proposed Action
Group Size Limits	• No limits.	• No limits.	• 30 people per campsite.	• 30 people per campsite.	• 30 people per campsite.

Table 2-10. Summary and Comparison of Alternatives – Recreational Opportunities/Day-Use Only Areas

Day-Use Only Areas	Alternative A Fewer watercraft and Less visitor use	Alternative B Current Management/ No Action	Alternative C Angler and floater enhancement/ More watercraft and visitor use	Alternative D Maximum watercraft and Visitor use	Alternative E Proposed Action
Primitive Day-Use Only Areas	<ul style="list-style-type: none"> • Thirteen areas: • Banfield • Brushy Chutes Island • Flanagan Slough • Hussey Lane • Two-Bit Riffle • Hellgate • North Zigzag • Zigzag • Dunn • Lower Dunn • Rocky Bar • Bud Lewis • Bailey Creek 	<ul style="list-style-type: none"> • Ten areas: • Brushy Chutes Island • Flanagan Slough • Hussey Lane • Hellgate • North Zigzag • Zigzag • Dunn • Lower Dunn • Bud Lewis • Bailey Creek 	<ul style="list-style-type: none"> • Eleven areas: • Banfield • Brushy Chutes Island • Flanagan Slough • Rogue Riffle Drive • Hussey Lane • Two-Bit Riffle • Hellgate • Hellgate Bridge Area • Dunn • Lower Dunn • Rocky Bar 	<ul style="list-style-type: none"> • Eight areas: • Banfield • Brushy Chutes Island • Flanagan Slough • Rogue Riffle Drive • Hussey Lane • Two-Bit Riffle • Hellgate Bridge Area • Rocky Bar 	<ul style="list-style-type: none"> • Six areas: • Brushy Chutes Island • Flanagan Slough • Hussey Lane • Hellgate Bridge Area • Bud Lewis • Bailey Creek
Developed Day-Use Only Areas	<ul style="list-style-type: none"> • Six areas: • Applegate Landing • Chair • Hellgate Bridge Viewpoint • Hellgate Canyon Viewpoint • Hellgate Recreation Site • Rand Historic Site 	<ul style="list-style-type: none"> • Seven areas: • Applegate Landing • Griffin Lane Complex • Hellgate Bridge Viewpoint • Hellgate Canyon Viewpoint • Hellgate Recreation Site • Chair • Rand Historic Site 	<ul style="list-style-type: none"> • Six areas: • Applegate Landing • Jumpoff Joe • Hellgate Bridge Viewpoint • Hellgate Canyon Viewpoint • Bud Lewis • Rand Historic Site 	<ul style="list-style-type: none"> • Seven areas: • Applegate Landing • Jumpoff Joe • Hellgate Bridge Viewpoint • Hellgate Canyon Viewpoint • Lower Hellgate • Bud Lewis • Rand Historic Site 	<ul style="list-style-type: none"> • Six areas: • Applegate Landing • Griffin Lane Complex • Hellgate Canyon Viewpoint • Hellgate Bridge Viewpoint • Hellgate Recreation Site • Rand Historic Site
Back Country Byways	<ul style="list-style-type: none"> • One byway: • Galice-Hellgate 	<ul style="list-style-type: none"> • One byway: • Galice-Hellgate 	<ul style="list-style-type: none"> • One byway: • Galice-Hellgate 	<ul style="list-style-type: none"> • One byway: • Galice-Hellgate 	<ul style="list-style-type: none"> • One byway: • Galice-Hellgate

Table 2-10. Summary and Comparison of Alternatives – Recreational Opportunities/Day-Use Only Areas

Day-Use Only Areas	Alternative A Fewer watercraft and Less visitor use	Alternative B Current Management/ No Action	Alternative C Angler and floater enhancement/ More watercraft and visitor use	Alternative D Maximum watercraft and Visitor use	Alternative E Proposed Action
Watchable Wildlife Sites	<ul style="list-style-type: none"> • Four sites: • Whitehorse • Flanagan Slough • Hog Creek • Hellgate Canyon Viewpoint 	<ul style="list-style-type: none"> • Three sites: • Whitehorse • Hog Creek • Hellgate Canyon Viewpoint 	<ul style="list-style-type: none"> • Five sites: • Whitehorse • Griffin Park/Griffin Lane Complex • Flanagan Slough • Hog Creek • Hellgate Canyon Viewpoint 	<ul style="list-style-type: none"> • Six sites: • Whitehorse • Flanagan Slough • Griffin Park/Griffin Lane Complex • Ferry Road River Front • Hog Creek • Hellgate Canyon Viewpoint 	<ul style="list-style-type: none"> • Three sites: • Whitehorse • Hog Creek • Hellgate Canyon Viewpoint

Table 2-10. Summary and Comparison of Alternatives – Recreational Opportunities/Day-Use Only Areas

Day-Use Only Areas	Alternative A Fewer watercraft and Less visitor use	Alternative B Current Management/ No Action	Alternative C Angler and floater enhancement/ More watercraft and visitor use	Alternative D Maximum watercraft and Visitor use	Alternative E Proposed Action
Firearm Discharge Regulations	<ul style="list-style-type: none"> • Firearm discharge prohibited from June 1 to September 15 in six areas: <ul style="list-style-type: none"> • Applegate Landing • Whitehorse Park • Griffin Lane Complex • Griffin Park • Ferry Road River Front • Flanagan Slough • Firearm discharge prohibited within 150 yards of a residence, building, developed or undeveloped recreation site, occupied area, or at any time across or on any public road, trail, or body of water, where people or property is exposed to injury or damage. 	<ul style="list-style-type: none"> • Firearm discharge prohibited within 150 yards of a residence, building, developed or undeveloped recreation site, occupied area, or at any time across or on any public road, trail, or body of water, where people or property is exposed to injury or damage. 	<ul style="list-style-type: none"> • Firearm discharge prohibited from June 1 to September 15 in eight areas: <ul style="list-style-type: none"> • Applegate Landing • Whitehorse Park • Griffin Lane Complex • Griffin Park • Matson to Ferry • Ferry Road River Front • Flanagan Slough • Hussey Lane • Firearm discharge prohibited within 150 yards of a residence, building, developed or undeveloped recreation site, occupied area, or at any time across or on any public road, trail, or body of water, where people or property is exposed to injury or damage. 	<ul style="list-style-type: none"> • Firearm discharge prohibited year-round. 	<ul style="list-style-type: none"> • Firearm discharge prohibited within 150 yards of a residence, building, developed or undeveloped recreation site, occupied area, or at any time across or on any public road, trail, or body of water, where people or property is exposed to injury or damage.

Table 2-11. Summary and Comparison of Alternatives – Recreational Opportunities/Public Access

Public Access	Alternative A Fewer watercraft and Less visitor use	Alternative B Current Management/ No Action	Alternative C Angler and floater enhancement/ More watercraft and visitor use	Alternative D Maximum watercraft and Visitor use	Alternative E Proposed Action
Improve and Expand Existing Trails	<ul style="list-style-type: none"> • One trail: • Umpqua Joe 	<ul style="list-style-type: none"> • None. 	<ul style="list-style-type: none"> • Four trails: • Hellgate • Stratton Creek • Buckhorn Mountain • Robert Dean (Hellgate Bridge to Ash Gulch, Centennial Gulch to Argo) 	<ul style="list-style-type: none"> • Eight trails: • Whitehorse Nature Trail • Matson to Ferry • East Cliffs • Hellgate • Buckhorn Mountain • Umpqua Joe • Stratton Creek • Robert Dean (Hellgate Bridge to Ash Gulch, Centennial Gulch to Argo) 	<ul style="list-style-type: none"> • Five trails: • Whitehorse Nature Trail • Hellgate • Buckhorn Mountain • Robert Dean (Hellgate Bridge to Ash Gulch, Centennial Gulch to Argo) • Umpqua Joe
Develop New Trails	<ul style="list-style-type: none"> • One trail: • Hellgate Placer Mine of Wells 	<ul style="list-style-type: none"> • None. 	<ul style="list-style-type: none"> • Three trails: • Hellgate Placer Mine of Wells • Rainbow • Robert Dean (Ash Gulch to Centennial, Argo to Grave Cr.) 	<ul style="list-style-type: none"> • Nine trails: • Applegate Landing • Ferry Road Nature Trail • Flanagan Slough Interpretive Trail • Merlin-Grave Creek Bicycle Route • Powerline • Hellgate Placer Mine of Wells • Rainbow • Galice Creek/Taylor Creek Trails • Robert Dean (Ash Gulch to Centennial, Argo to Grave Cr.) 	<ul style="list-style-type: none"> • Two trails: • Robert Dean (Ash Gulch to Centennial, Argo to Grave Cr.) • Rainbow

Table 2-11. Summary and Comparison of Alternatives – Recreational Opportunities/Public Access

Public Access	Alternative A Fewer watercraft and Less visitor use	Alternative B Current Management/ No Action	Alternative C Angler and floater enhancement/ More watercraft and visitor use	Alternative D Maximum watercraft and Visitor use	Alternative E Proposed Action
Maintain and Improve Existing Boat Ramps	<ul style="list-style-type: none"> • Ten ramps: • Whitehorse County Park • Ferry Hole County Park • Griffin County Park • Robertson Bridge County Park • Hog Creek (BLM/Josephine County) • Indian Mary County Park • Ennis County Park • Galice County Park • Almeda County Park • Grave Creek 	<ul style="list-style-type: none"> • Ten ramps: • Whitehorse County Park • Ferry Hole County Park • Griffin County Park • Robertson Bridge County Park • Hog Creek (BLM/Josephine County) • Indian Mary County Park • Ennis County Park • Galice County Park • Almeda County Park • Grave Creek 	<ul style="list-style-type: none"> • Ten ramps: • Whitehorse County Park • Ferry Hole County Park • Griffin County Park • Robertson Bridge County Park • Hog Creek (BLM/Josephine County) • Indian Mary County Park • Ennis County Park • Galice County Park • Almeda County Park • Grave Creek 	<ul style="list-style-type: none"> • Ten ramps: • Whitehorse County Park • Ferry Hole County Park • Griffin County Park • Robertson Bridge County Park • Hog Creek (BLM/Josephine County) • Indian Mary County Park • Ennis County Park • Galice County Park • Almeda County Park • Grave Creek 	<ul style="list-style-type: none"> • Ten ramps: • Whitehorse County Park • Ferry Hole County Park • Griffin County Park • Robertson Bridge County Park • Hog Creek (BLM/Josephine County) • Indian Mary County Park • Ennis County Park • Galice County Park • Almeda County Park • Grave Creek
Improve Undeveloped Boat Access Sites	<ul style="list-style-type: none"> • One ramp: • Argo 	<ul style="list-style-type: none"> • Two ramps: • Rand • Argo 	<ul style="list-style-type: none"> • Three ramps: • Matson County Park • Rand • Argo 	<ul style="list-style-type: none"> • Three ramps: • Matson County Park • Rand • Argo 	<ul style="list-style-type: none"> • Three ramps: • Matson County Park • Rand • Argo
Develop New Boat Ramps	<ul style="list-style-type: none"> • None. 	<ul style="list-style-type: none"> • None. 	<ul style="list-style-type: none"> • None. 	<ul style="list-style-type: none"> • Two ramps: • Jumpoff Joe • Dunn 	<ul style="list-style-type: none"> • None.
Maintain Existing Fishing Access Sites	<ul style="list-style-type: none"> • None. 	<ul style="list-style-type: none"> • Two sites: • Rainbow • Carpenters Island 	<ul style="list-style-type: none"> • Two sites: • Rainbow • Carpenters Island 	<ul style="list-style-type: none"> • Two sites: • Rainbow • Carpenters Island 	<ul style="list-style-type: none"> • Two sites: • Rainbow • Carpenters Island

Table 2-11. Summary and Comparison of Alternatives – Recreational Opportunities/Public Access

Public Access	Alternative A Fewer watercraft and Less visitor use	Alternative B Current Management/ No Action	Alternative C Angler and floater enhancement/ More watercraft and visitor use	Alternative D Maximum watercraft and Visitor use	Alternative E Proposed Action
Develop New Fishing Access Sites	• None.	• Two sites: • Finley Bend • Steelhead	• Three sites: • Finley Bend • Steelhead • Jumpoff Joe	• Three sites: • Finley Bend • Steelhead • Jumpoff Joe	• One site: • Finley Bend (universally accessible).
Vehicle Access on Gravel Bars	• Two access areas: • Griffin Lane Complex • Rocky Bar	• Five access areas: • Whitehorse • Griffin Lane Complex • Rocky Bar • Rand • Argo	• Seven access areas: • Whitehorse • Griffin Lane Complex • Flanagan Slough • Rocky Bar • Chair • Rand • Argo	• Ten access areas: • Applegate Landing • Griffin Land Complex • Flanagan Slough • Stratton Creek • Rocky Bar • Robert Dean • Chair • Rand • Almeda • Argo	• Five areas: • Griffin Lane Complex • Rocky Bar • Chair • Rand • Argo

Table 2-12. Summary and Comparison of Alternatives – Recreational Opportunities/Visitor Services

Visitor Services	Alternative A Fewer watercraft and Less visitor use	Alternative B Current Management/ No Action	Alternative C Angler and floater enhancement/ More watercraft and visitor use	Alternative D Maximum watercraft and Visitor use	Alternative E Proposed Action
Facilities Expansion	• Maintain Smullin Visitor Center at Rand.	• Expand Smullin Visitor Center at Rand.	• Maintain Smullin Visitor Center at Rand.	• Maintain Smullin Visitor Center at Rand.	• Expand Smullin Visitor Center at Rand.

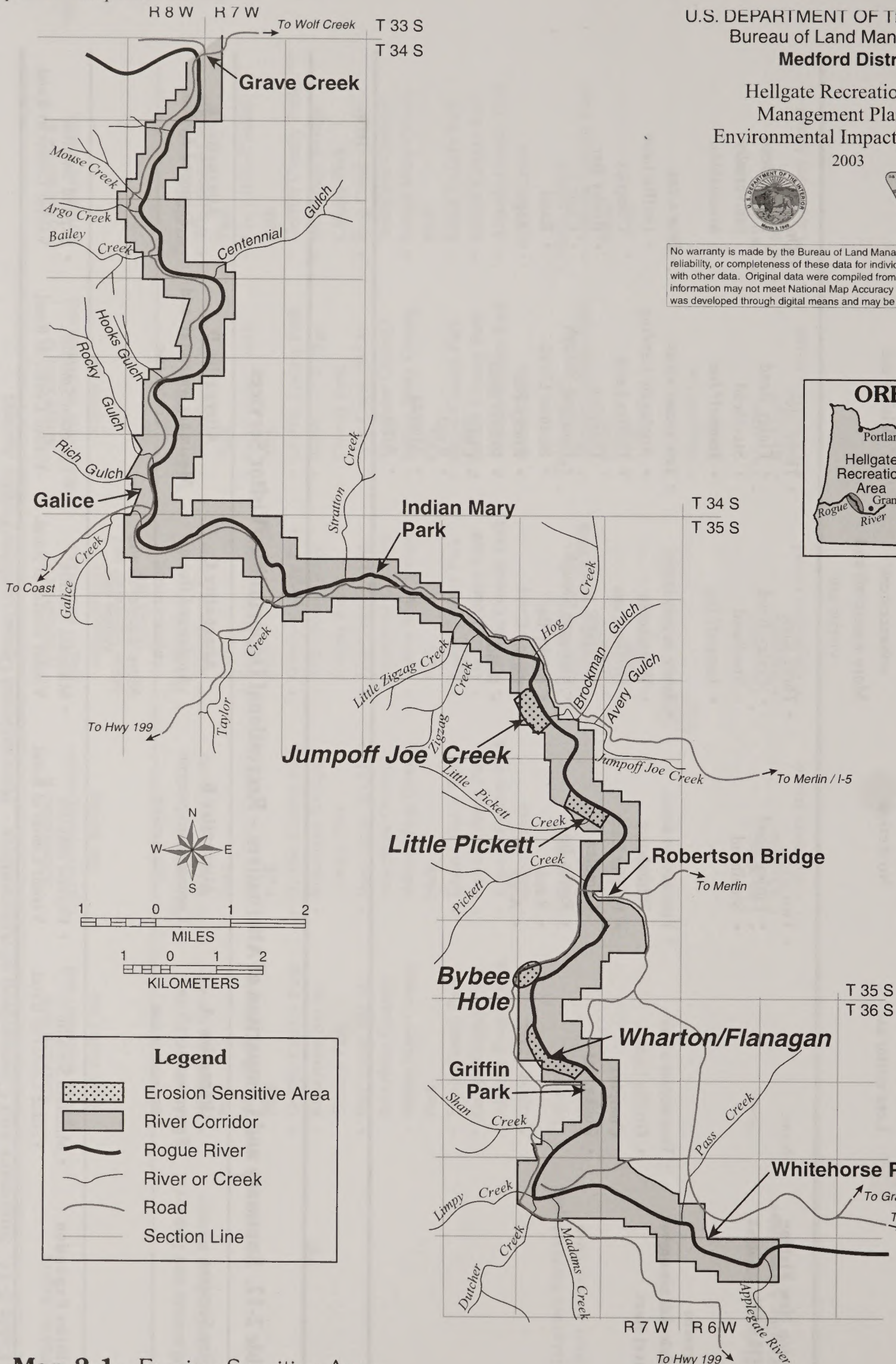
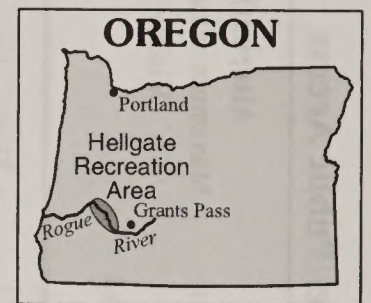
U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Medford District

Hellgate Recreation Area
Management Plan and
Environmental Impact Statement
2003



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

D10-02-02 : JR



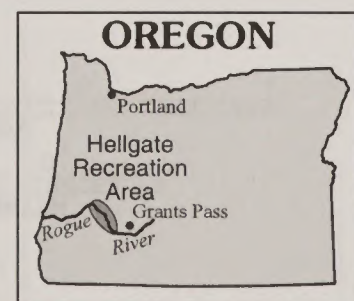
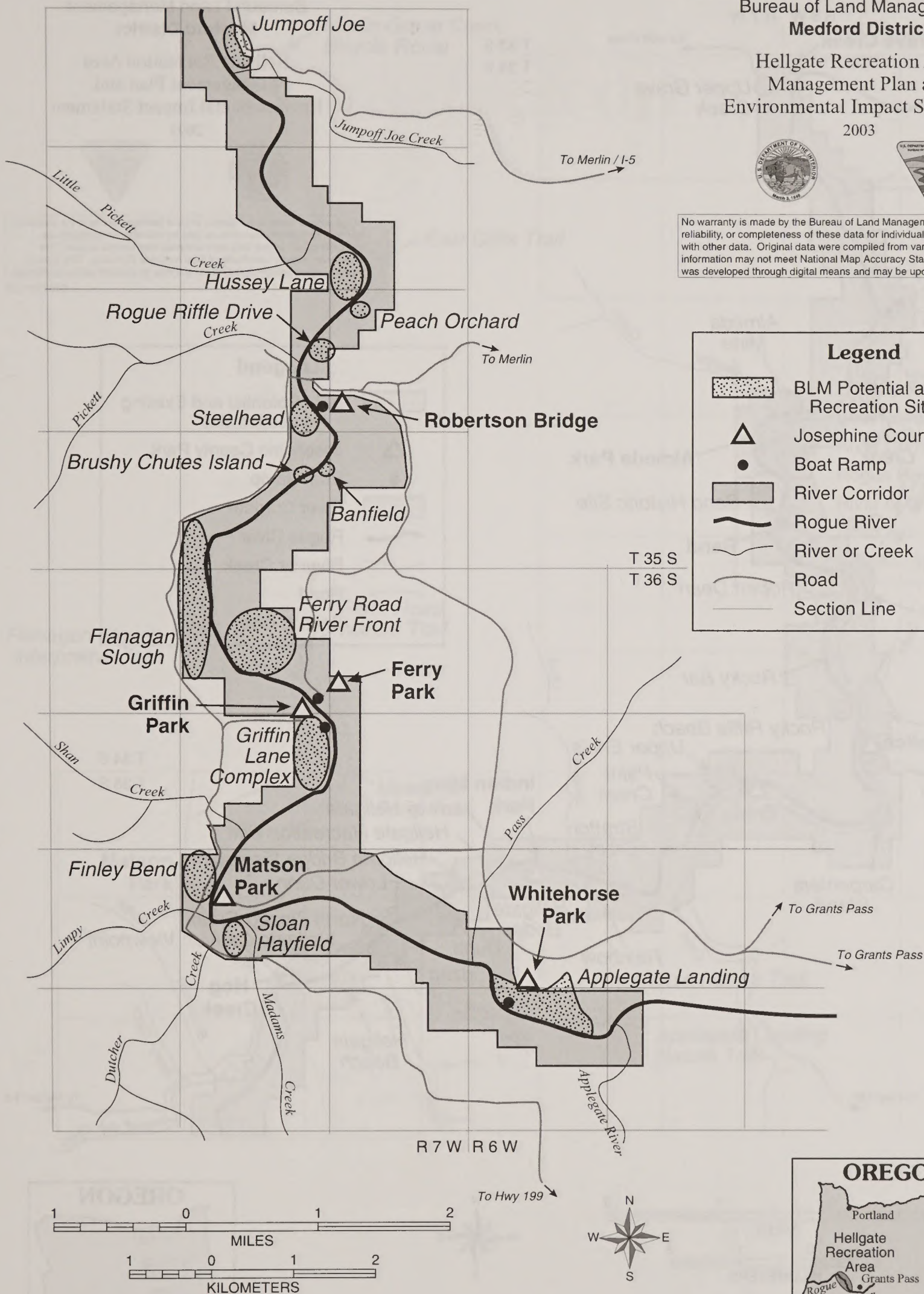
Map 2-1: Erosion Sensitive Areas
Rogue River: Applegate River to Grave Creek

Hellgate Recreation Area
 Management Plan and
 Environmental Impact Statement
 2003



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

D10-02-02 : JR



Map 2-2: Potential and Existing Camping and Day-Use Sites
 Rogue River: Applegate River to Jumpoff Joe Creek

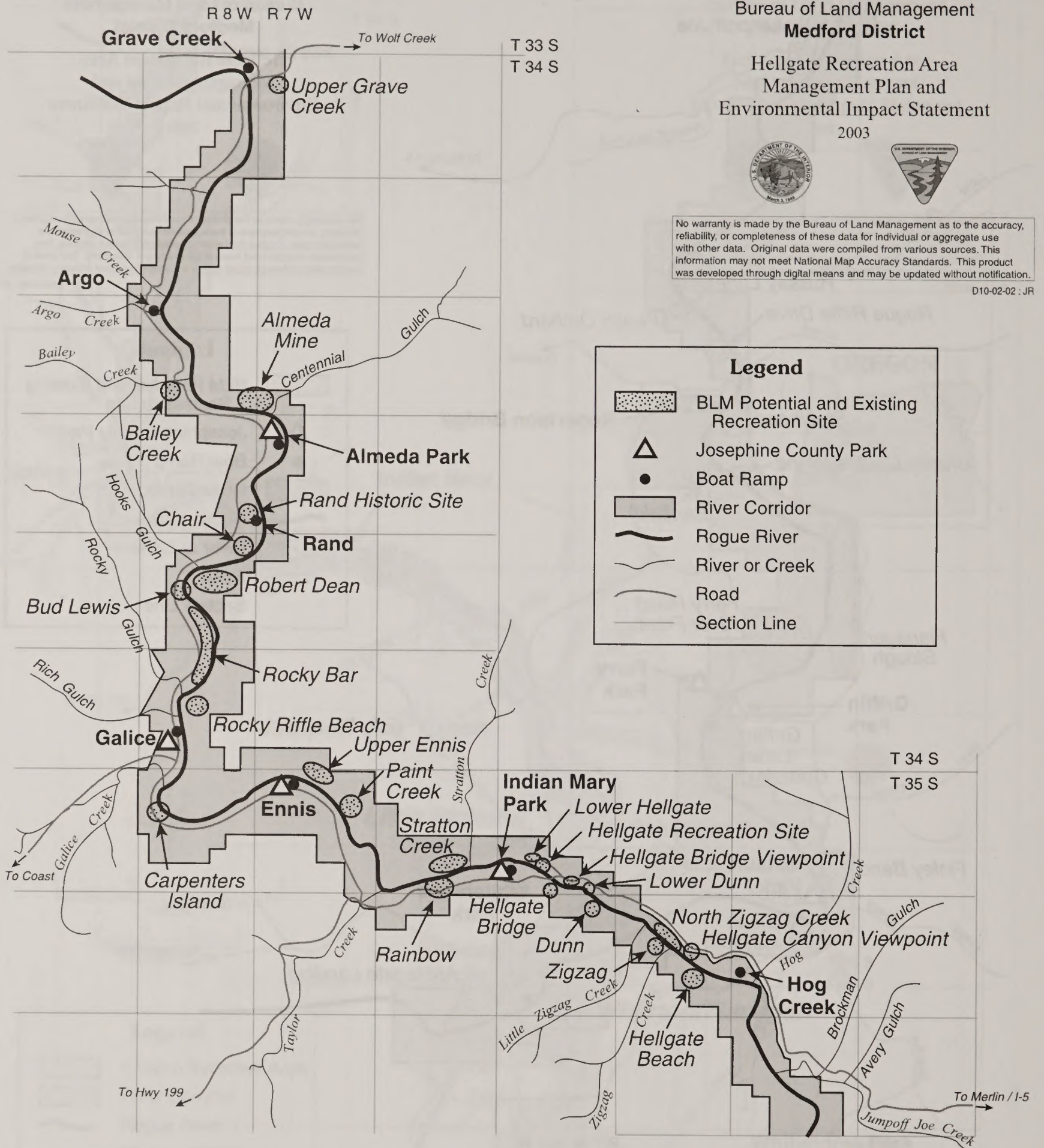
U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Medford District

Hellgate Recreation Area
Management Plan and
Environmental Impact Statement
2003



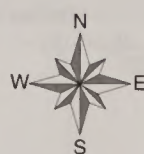
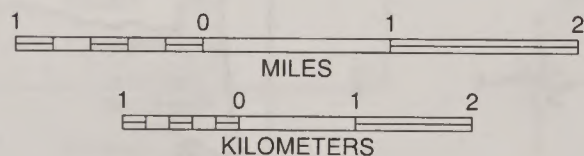
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

D10-02-02 : JR



Legend

- BLM Potential and Existing Recreation Site
- Josephine County Park
- Boat Ramp
- River Corridor
- Rogue River
- River or Creek
- Road
- Section Line



Map 2-3: Potential and Existing Camping and Day-Use sites
Rogue River: Jumpoff Joe Creek to Grave Creek

U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Medford District

Hellgate Recreation Area
Management Plan and
Environmental Impact Statement
2003



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

D10-02-02 : JR



Map 2-4: Potential Trails
Rogue River: Applegate River to Jumpoff Joe Creek

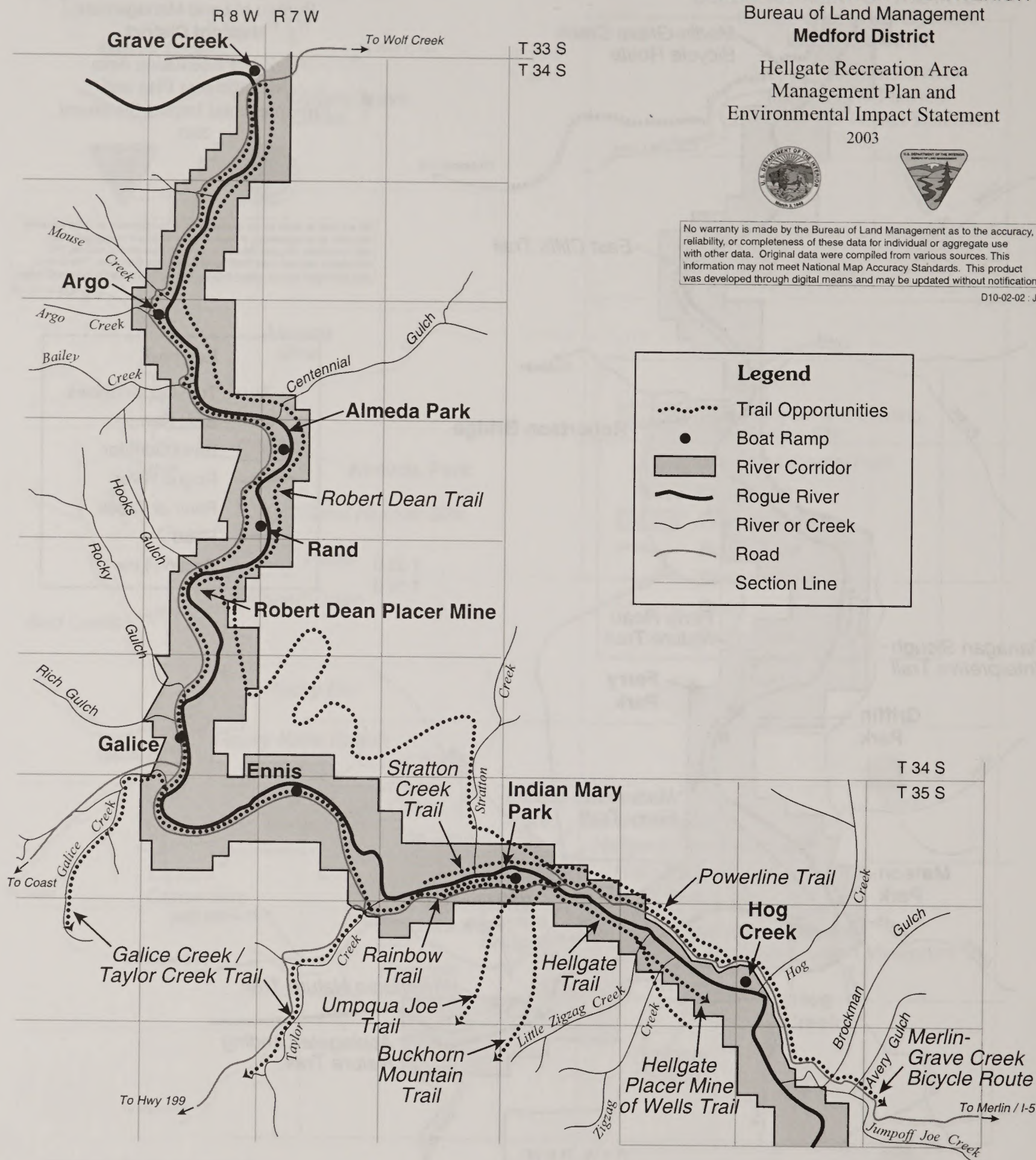
U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Medford District

Hellgate Recreation Area
Management Plan and
Environmental Impact Statement
2003



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

D10-02-02 : JR



Map 2-5: Potential Trails
Rogue River: Jumpoff Joe Creek to Grave Creek

Affected Environment

Chapter 3

Affected Environment

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
NORTHWEST REGION

Ecological Resources and
Management Division
Environmental Impact Statement



This document is a technical report prepared for the Bureau of Land Management by the Northwest Region. It contains information that is not to be released to the public without the approval of the Bureau of Land Management. The information in this document is for internal use only and should not be used for any other purpose without the approval of the Bureau of Land Management.

Legend	
	State Boundary
	County Boundary
	Major Road
	Minor Road
	Waterway
	Wilderness Area



Map 2-5a: Primitive Trails
Northwest Region, Oregon

Summary of Changes

The following changes were made to Chapter 3 between the Draft and the Final EIS. Minor corrections, explanations, and edits are not included on this list.

Where possible, data has been updated throughout the chapter using the most current information.

The “Fire” section has been expanded to provide the most current information. Power line inspections have been removed; they are no longer conducted by ODF. The “Wildland Fire Management” section has been added.

A reference to the Josephine County Soil Survey has been added to the “Soils” section. Public comments indicated an interest in additional information on soils found in the area.

The Clean Water Act information has been updated in the “Water Quality” section to reflect current policy.

The “Water Quantity” section has been updated to include recent water events.

An explanation of stream regulation necessary to maintain critical anadromous fish runs for the summer of 2001 was added.

Appendix F, *Botanical Resources Background Paper*, of the RAMP/DEIS has been removed from this document. “Botanical Resources” has been added to Chapter 3 to provide a description of the vegetative characteristics as they exist in the planning area.

“Class A” scenery has been defined.

An error was corrected in Visitation Patterns in the “Motorized Boaters” section regarding average number of people per motorized boat. The RAMP/DEIS stated “3 people”; it should have read “44 people.”

The “Visitation Patterns” section has been updated to include user numbers gathered in August 2001.

The “Commercial Motorized Boat Angling” section has been added to Chapter 3. It was inadvertently left out of the document.

“Recreational Mining” has been added to Recreational Opportunities. Recreational mining was addressed in the RAMP/DEIS Appendix C. Public comments indicated that it should be recognized as a recreational opportunity.

The “Scenery” section has been renamed “Visual Resources”. Visual Resource Management has been added to the “Visual Resources” section; “Scenery” is a subsection.

The “Recreational Opportunities” section has been expanded to be consistent with Chapter 2.

The “Visitor Services” section has been rewritten to expand interpretive services in response to public comments. The history of Rand was removed; it does not reflect current conditions.

Appendix E, “Recreation Opportunity Spectrum”, of the RAMP/DEIS has been removed from the document. It has been added to Chapter 3 to reflect the current condition. It was not used in formulation of the alternatives.

The “Fees” section has been updated to reflect the current commercial permit fees.

The Mt. Reuben Road number (34S-8W-01) has been added to Table 3-17.

The commercial outfitter fee collection procedure has been removed from “Guided and Outfitter Services” and has been added to the “Gross Revenue” section.

The number of commercial motorized boat angling permits has been corrected from one permit to three permits.

“Limited Off-Highway Vehicle Use Areas” has been eliminated because the intent of these areas was not for all off-highway vehicles, but for vehicles off designated roads in certain areas for river access. The areas listed in the RAMP/DEIS under “Limited Off-Highway Vehicle Use Areas” are now listed under “Vehicle Access on Gravel Bars”. Vehicles are prohibited off of existing roads open to such use, except when parking on gravel bars at five locations: Whitehorse, Griffin Lane Complex, Rocky Bar, Rand, and Argo. The prohibition is pursuant to 43 CFR 8351-2-1, *Federal Register* Vol. 57, No. 110, 24271-24272.

Introduction

Chapter 3, Affected Environment, describes the physical, biological, and socioeconomic characteristics of BLM-administered land as they exist in the planning area. Resources that could be affected by BLM management alternatives are emphasized.

The River’s Physical Environment

In the Hellgate Recreation Area (HRA), the river has an average gradient of approximately 8 feet per mile and is characterized by riffle/run/pool channel characteristics with occasional Class I/II rapids. The river averages approximately 300 feet wide. Usable routes for powerboats through some riffles and rapids narrow to 20-40 feet wide. One location, Centennial Rock, narrows to less than 40 feet and is bound by near vertical bedrock walls.

In the upper 12.8 miles, the Applegate Reach, the river has a gradient of approximately 7 feet per mile and the channel averages approximately 400 feet wide. The channel is characterized by a riffle/run/pool configuration. In the lower 14.5 miles, the Dunn Reach, the river has a gradient of approximately 10 ft/mi. and averages approximately 200 feet in width. In this section, the channel is characterized by a rapid/run/pool configuration; the rapids are structured by bedrock controls.

Five distinct vegetation communities exist within the Hellgate Recreation Area of the Rogue River. All of these communities are shaped by the climate and geology of the broader southwestern Oregon region. This area is significantly drier than further north and geologically it is an extremely complex mix of soils and rock types. There are occasional intrusions of serpentine rocks and soils which contribute significantly to the vegetational characteristics of the area. These serpentine soils are also an important factor in the large number of endemic and special status plants in the area (Whitman 1993).

Outstandingly Remarkable Values

In 1968, the Rogue River was one of the original eight rivers that received “instant” designation under the Wild and Scenic Rivers Act. The outstandingly remarkable values for the Rogue River, as identified by Congress (HR 1917 September 24, 1968 and HR 1623 July 3, 1968); and as described in the *Master Plan for the Rogue River Component of the National Wild and Scenic Rivers System* (USDI 1969); and as described in the 1972 Plan, the *Rogue National Wild and Scenic River, Oregon: Notice of Revised Development and Management Plan* (Federal Register Vol. 37, No. 13, 13408-134116) include the natural scenic qualities, fish, and recreation. Other river-related values that are important, but were not considered outstandingly remarkable at the time include wildlife and cultural resources (USDI 1992).

Natural Scenic Qualities. Recognized for its diversity of scenery due its geology, topography, and relatively undeveloped visual appearance.

Fisheries Resource. Recognized for its outstanding salmon and steelhead fishing.

Recreational Opportunities. Recognized primarily for its exciting white water float trips and its outstanding salmon and steelhead fishing. Other recreation activities recognized included hunting, swimming, hiking, boating, picnicking, camping, and sightseeing.

Climate

The Rogue River basin climate is classified as a Mediterranean climate; heavily influenced by the Pacific Ocean weather fronts, which cause cloudy, rainy winters and warm, dry summers. Annual rainfall varies widely from 20 inches near Medford to over 100 inches in the Siskiyou Mountains. The average annual precipitation in the planning area ranges from 40 to 60 inches per year. Data from the Remote Automated Weather Station, located in Merlin at the BLM’s Sprague Seed Orchard, indicates the mean annual precipitation for 1993-2000 was 36.99 inches. January has the heaviest monthly precipitation average with 7.7 inches and July receives the lightest precipitation at .35 inches. July is the warmest month with a mean temperature of 82.8°F. December has the coldest mean temperature of 41.7°F. August is the driest month with a mean relative humidity of 35.9 percent and December is the dampest month with a mean relative humidity of 91.5 percent. July is the windiest month with an average wind speed of 3.7 mph. January has the lowest average wind speed at 1.7 mph. See Figure 3-1 for the ten-year average daily precipitation and Figure 3-2 for the ten-year average daily temperature.

Air Resources

Air Quality

Factors that affect air quality include meteorology and emission sources. Weather processes usually cleanse the air of most pollution. Atmospheric stability is of primary importance. The stability of the air determines the amount of vertical mixing that can occur, which disperses pollutants. Stable air prevents mixing and traps pollutants at the ground level. Unstable air facilitates mixing and dispersal of pollutants.

Seasonal patterns in weather and pollutant emissions influence air quality. The weather pattern in late fall and winter is one of periods of stable air occurring between storm events. These stable periods inhibit dispersion by reducing atmospheric mixing. During the winter, motor vehicles produce more carbon monoxide, and home heating produces fine particulate (PM₁₀) when wood is used as a fuel. These factors combine to produce a higher pollution level for these pollutants during the winter (ODEQ 1993).

Atmospheric ventilation is usually better during spring and summer. Less carbon monoxide and particulates are produced during this time. These pollutants are normally not a problem during these seasons (ODEQ 1993). Summer air quality is impacted during relatively poor ventilation periods. Ozone concentrations reach peak levels during sunny warm periods of poor ventilation. Ozone and resulting “smog” are the major concerns in the summer season.

Pollution Sources

Sources of pollution that impact the Hellgate Recreation Area are classified in two categories: area sources and mobile sources (ODEQ 1993). Area sources are relatively small individual sources of pollution, usually spread over a broad geographic area that collectively contributes emissions. Area sources include: wood stoves, slash and field burning, forest fires, backyard burning, and dust emissions from roads and agricultural tilling. Mobile sources include: motor vehicles, motor boats, off-highway vehicles, and aircraft.

The major impact to air quality in the Hellgate Recreation Area is smoke. A minor source of pollution are emissions from motor vehicles and boats. Pollutants of concern include fine particulate (PM₁₀) and carbon monoxide (CO).

Fine Particulate

Grants Pass continues to be classified as a non-attainment area for fine particulate (PM₁₀). Grants Pass last exceeded the PM₁₀ 24-hour average standard in 1987. Difficulty in meeting the PM₁₀ standard was due primarily to effects from residential wood heating. Maximum levels recorded between 1987 and 1993 occurred in December or January, with the exception of 1987, when September had the maximum level. This was a result of widespread large fires burning at the time. Maximum levels have not been reached in the spring and summer months.

Carbon Monoxide

Grants Pass continues to be classified as a non-attainment area for carbon monoxide (CO) 1-hour average and 8-hour average standards. Grants Pass last exceeded the 1-hour standard in 1990 and the 8-hour standard in 1991. Maximum averages all occur from December through February. Maximum levels are never reached during the spring and summer months. A request for designation as an attainment area is planned.

Visibility

Visibility is monitored in federal Class I areas during the summer season. The Kalmiopsis Wilderness Area and Crater Lake National Park are the closest Class I areas in this region. Wildland fires occurring in the summer have the greatest impact on visibility within the river corridor. Shifts in past prescribed burning practices from summer and early fall have improved visibility impairment over the 1982-1984 baseline levels. Currently, prescribed burn activity in this area occurs during the months of March through May and October into December.

Light Scattering

Light scattering has been measured in Grants Pass since 1991. Measurements through 1993 show peak 1-hour and 24-hour averages occur in December and January. This impact is primarily the result of wood burning stoves and atmospheric stability that occurs during this time of the year.

Smoke Emissions from Fire

The principal impact to air quality in the Hellgate Recreation Area and surrounding area is expected to be the temporary visibility impairment caused by smoke from prescribed fires and wildfire.

Potential short duration (single day to several weeks) high level PM₁₀ and PM_{2.5} emissions would be expected from major wildfire events within the local area or region. Prescribed burning PM₁₀ emissions would not be expected to exceed PM₁₀ standards. If this did occur, it most likely would be highly localized and of no more than a single day in duration.

The Clean Air Act, as amended, directs the State of Oregon to meet or exceed national ambient air quality standards by 1994. The Oregon Smoke Management Program (OSMP), a part of the required State Implementation Plan (SIP), identifies strategies for minimizing the impacts of smoke from prescribed burning on the densely-populated, designated non-attainment, and smoke-sensitive areas within western Oregon. Particulate matter with a size of 10 microns or less (PM₁₀) is the specific pollutant addressed in the SIP.

Grants Pass is the closest designated area to the HRA for non-attainment. The Hellgate Recreation Area is classified as a Class II area requiring no special emphasis to minimize smoke impacts. The OSMP does, however, place an emphasis on minimizing impacts in high use recreation areas during peak use periods.

The peak recreation use period for the recreation section is during the months of July and August. Smoke emissions produced by prescribed burning would have a low potential for impacting the recreation section during peak recreation use periods. Prescribed burning is constrained July 4 through Labor Day by the Oregon Visibility Protection Plan. The Medford District BLM traditionally completes prescribed burning operations by the middle of May, and does not resume burning until early October. Potential impacts from prescribed burning smoke could occur from other federal and private burning west of the coastal crest and north of the Medford District BLM, where conditions allow an extended burn season in the spring and earlier resumption in the fall. However, almost no prescribed burning is conducted in July and August in the vicinity of the HRA.

The largest potential impact to air quality during the peak recreational period is from residual smoke from wildfire in the region or in the immediate vicinity. Historic occurrence of long-lasting, large wildland fires that produce larger volumes of smoke during the months of August and September have been common within this region.

Fire

Fire Environment

The fire environment is defined as the conditions, influences, and modifying forces that control fire behavior (Countryman 1972); these include vegetation, weather, and topography. The fire regime (i.e., fire type, intensity, size, frequency, and seasonality) is dependent upon the fire environment.

Vegetation is the one factor of the fire environment that is within the direct control of land managers.

The concepts of risk and hazard serve as links between fire environment, fire regime, and fire management. Risk can be defined as the causative agent of a fire start, such as human activity or lightning. Hazard can be defined as the existence of a fuel complex (the kind, arrangement, volume, condition, and location of flammable material) that constitutes a threat of wildfire ignition, unacceptable fire behavior and severity, or suppression difficulty (Deeming 1990).

The fire environment of the Hellgate Recreation Area is warm and dry. This is a result of its location in the rain shadow on the east side of the crest of the coastal mountain range. The topography for the majority of the area is steep and rugged with deeply incised streams in narrow draws. The fuel complex is dominated by the Douglas-fir plant series with a smaller portion in the tanoak series. The Douglas-fir series has large fuels, fuel ladders, and an accumulation of fine fuels and surface litter. The tanoak series has a live fuel ladder with only moderate amounts of fuel accumulation and some large fuels associated with the conifer components of this series (USDA 1989).

The river canyon and adjacent drainage create local wind conditions that are hard to predict or anticipate. Wind directions at lower elevations can be opposite to high level or ridgetop winds. Strong winds are experienced when wind flow is compressed because of canyon topography. A common summer wind condition is an upriver flow beginning late in the morning, increasing in strength as the temperature increases, and then tapering off by early evening. These wind conditions are of concern in determining fire behavior and in suppression efforts.

Natural Role of Fire

Fire has always played an integral part in the creation of the forest environment in the Pacific Northwest (Agee 1981). It is an agent of change in the forest ecosystem (Omi and Laven 1982). The degree of change caused by fire is dependent upon the intensity and duration of the fire, the frequency of occurrence, and the size of the area burned.

The natural role of fire (pre-1800s) in the Hellgate Recreation Area has historically been that of a frequent, low-severity fire regime. A low-severity fire regime is characterized as frequent (1-25 years) fires of low intensity (Agee 1990) and described as a Fire Regime Group I (Hardy et al. 2000). These frequent, low-intensity fires burned off surface litter and small understory vegetation. The overstory vegetation experiences little mortality. This periodic removal of surface and understory fuel prevents fuel build up and prevents fires from burning at high intensity, even under severe fire weather conditions. This keeps the sites open and the overstory predominately in a mature stage at a landscape level.

From the mid-1800s through the early 1900s, European Americans had a large impact on the frequency of wildfire. During this period, fire was used by trappers, miners, ranchers, and settlers to eliminate vegetation, drive game, enhance forage, and clear land (Atzet, Wheeler, and Gripp 1988). These frequent low-intensity surface fires eliminated much of the natural fuel accumulations and understory vegetation. The removal of fire and the onset of fire suppression programs starting in this area around 1910, created a relatively fire-free condition. As a result of fire exclusion, natural species composition is changing and the fuel complex is becoming more flammable and increasingly hazardous.

Due to the exclusion of fire and past management practices, forests are becoming denser and dead fuels are accumulating. This situation has the potential for an increase in larger and more severe wildfires. A series of Condition Classes have been developed to describe how far from the normal the historic fire regime is currently, considering key ecosystem components of species composition, structural stage, stand age, and canopy closure (Hardy et al. 2000). The majority of the Hellgate

Recreation Area can be classified as Condition Class II with some areas approaching Condition Class III. A full description of Condition Classes with their attributes and examples of management options is found in Table 3-1.

Wildland Fire Management

Fire protection and suppression in the planning area, as with all BLM-administered lands in the Grants Pass Resource Area, is accomplished through a contract with the Oregon Department of Forestry (ODF). This contract provides for fire prevention, detection, initial attack, suppression (including mop-up and rehabilitation), and reporting services on BLM lands in Western Oregon. An extra protection agreement is in place under the ODF contract for the BLM-administered portion of the Rogue River.

Fire Prevention and Presuppression

The wildfire prevention program specific to the Hellgate Recreation Area has four parts: public contacts, patrols, sign posting, and regulated use closures.

Public Contact

BLM staff and ODF suppression resources make contact with all campers outside of the designated campgrounds and with as many people as possible inside camping areas. Children camping at Indian Mary Campground are contacted and provided prevention material by ODF. In addition, prevention contacts are made at the Grave Creek Boat Ramp.

Patrols and Resources

ODF engine crews, the ODF Wild River crew, and a Forest Protection Supervisor, patrol and make public contacts from Hog Creek to the Grave Creek Bridge during the summer fire season. Engines and suppression resources that are positioned in and near the Hellgate Recreation Area include engines stationed at Galice and Riverbanks, with a heavy engine and an initial attack hand crew at the Grants Pass Unit Headquarters in Merlin.

Sign Posting

Fire prevention signs, including regulations and the BLM and ODF logos, are posted in heavy day-use areas, all camping areas, and at trail heads. Additional postings and information are provided at the Smullin Visitor Center at Rand.

Regulated Use Closures

Three levels of regulated-use closures are authorized under Oregon law OR477.545. These are put into affect at the discretion of the State Forester when it is determined necessary to prevent danger to life and property. This authority for regulated-use closures is delegated down to the District Forester who consults with the BLM Fire Management Officer. The first level requires entrants into designated areas to comply with requirements as set forth in the regulated use closures. The second level allows entry into an area by permit only and with certain requirements. The third level is an absolute closure of the area to all forms of use. The first level is the only level that has been used in the recreation area. This regulated use level allows campfires only in areas maintained and designated as overnight camping areas by the Josephine County Parks Department. Smoking is permitted only in designated areas and between the river and the high water mark.

Wildfire Suppression

The current procedure for wildfire suppression is for the ODF to immediately notify the BLM of a fire in the Hellgate Recreation Area. The ODF response is an automatic dispatch of five engines and a Forest Protection Supervisor. At a higher level of fire danger (a burning index of 70 or above), a helicopter with repelling fire fighters may be included in initial attack if the fire location is inaccessible. In extreme fire danger, air tankers will be considered for initial attack. The BLM will send a representative to function as a project inspector to administer the contact. A BLM environmental specialist may also be assigned to the fire to advise the ODF on BLM resource objectives. The resource objectives for the recreation area are to minimize damage to soils, watersheds, scenic values, and wildlife habitat.

Fuels Management

Currently, there is not a fuels hazard reduction plan for the Hellgate Recreation Area. The need exists to identify areas of high fire hazard and risk and to formulate hazard abatement treatment alternatives. This type of assessment has been conducted on the wild section of the Rogue River.

Unlike other lands managed by the Grants Pass Resource Area, special management considerations are in place for the river corridor, which is classified as Class I for Visual Resource Management (see Chapter 3, Visual Resources). Many portions of the area identified have scenic easements in place where the land is held privately, but the vegetation is owned and managed by the BLM. Within this area, 12 concentrations of wildland/urban interface occur for a total of 190+ residences.

Soils

The area along the Hellgate Recreation Area is characterized by steep mountains encompassing a narrow river valley. Mountain slopes are long and generally dissected. The mountains are made up of altered volcanic and sedimentary rock and intrusive igneous rock. The layered rocks have been steeply folded, faulted, and, in places, intruded by granitic rock and peridotite, much of which has been altered to serpentine.

The river valley consists of flood plains, terraces, alluvial fans, and hills. The flood plains are mainly narrow, but do broaden out in some areas, particularly from the mouth of the Applegate River to Robertson Bridge. The terraces are broad, nearly level areas of water-deposited material. The alluvial fans are gently sloping areas at the mouths of the streams and draws. These areas may receive deposits during periods of heavy rains. Low-lying hills adjacent to the river are remnants of larger landscapes that have been eroded.

Soils immediately adjacent to the river are deep and well-drained on most flood plains and lower river terraces. These soils formed in recent mixed alluvium and generally range in slope from zero to three percent. Typical soil series found on these landscapes are Newberg, Camas, and Evans. Textures of the soils found immediately adjacent to the river are fine sandy loam, gravelly sandy loam, and loam.

Soils on the higher river terraces and alluvial fans are mainly deep and well drained. These soils formed in alluvium and colluvium that weathered from altered sedimentary and extrusive igneous parent material. Slopes range from 2 to 25 percent. Typical soil series found on this landscape are Takilma, Kerby, and Abegg. Textures of the soils found in these areas are cobbly loam, gravelly loam, and loam. Erosion potential for these soils is moderate.

Along the steep narrow river canyons and mountainous area adjacent to the river, the soils are shallow to deep, well drained, and somewhat excessively well drained. The soils on these landscapes were formed in alluvium and colluvium and range in slope from 10 to 75 percent. Typical soil series found on this landscape are Speaker, Beekman, and Vermisa. Textures of these soils range from extremely gravelly loam to loam. See the *Soil Survey of Josephine County Oregon* for a list of soils found in the river corridor (USDA 1983).

Approximately 95 percent of the banks in the Hellgate Recreation Area are considered stable and consist of bedrock outcrops or stable alluvium. There are a few banks in the 27-mile area that, locally, are highly eroded and continue to be erosion prone. An estimated 0.4 miles out of 53.7 total miles of riverbanks are in this severe erosion category. An additional 2.0 miles of the 53.7 total miles of riverbanks show some local erosion that is limited rather than severe (Klingeman 1993). Riverbanks that fall into the severe and limited erosion categories are considered to be erosion sensitive areas. These areas make up approximately five percent of the total riverbank area. Sediment in the river is predominately from sources other than the local riverbanks.

Water Resources

The Rogue River basin encompasses approximately 5,160 square miles. The basin is roughly rectangular in shape, extending approximately 110 miles east and west and 60 miles north and south. It includes nearly all of Jackson and Josephine counties and small portions of Curry, Douglas, Klamath, and Coos counties. Major tributaries include the Applegate and Illinois rivers. Some tributaries have headwaters in Siskiyou and Del Norte counties in northern California. The Hellgate Recreation Area encompasses approximately 27 miles from the mouth of the Applegate River to the mouth of Grave Creek.

Water Quality

The overall goal of the Clean Water Act (33 U.S.C.466 et seq.) is to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters” in order to protect the many important and beneficial uses of those waters. Two of those beneficial uses are aquatic habitat for fish and water recreation activities. Because these two uses require very clean water, the maintenance of water quality for these uses generally assures the protection of all the other beneficial uses. Section 101 of the Federal Clean Water Act, as amended by the Water Quality Act of 1987, declares: “It is the national policy that programs for the control of nonpoint sources of pollution be developed and implemented in an expeditious manner so as to enable the goals of this act to be met through the control of both point and nonpoint sources of pollution.”

Section 319 of the Clean Water Act requires each state to “identify those waters within the state which, without additional action to control nonpoint sources of pollution, cannot reasonably be expected to attain or maintain applicable water quality standards or the goals and requirements of this act.”

The Clean Water Act directs federal agencies to comply with state water quality requirements to restore and maintain quality necessary to protect identified beneficial uses. The BLM is the designated management agency charged with implementing and enforcing natural resource management programs for the protection of water quality on lands under its jurisdiction. A memorandum of agreement (MOA) between BLM and ODEQ, signed in 1989, delineates the BLM’s responsibilities and activities concerning implementation of Oregon’s nonpoint source pollution control program. The MOA recognizes that nonpoint source water quality problems are best controlled through the development, adoption, and implementation of sound resource management

practices, referred to as best management practices (BMPs). The BLM implements resource management practices that equal the state's BMPs for controlling nonpoint source pollution.

Water quality in streams on BLM-administered lands in the Rogue River basin is generally good and supports a variety of beneficial uses. However, under the Clean Water Act, this section of the river is listed as water quality limited under section 303(d) for the following:

1. Warmer than standard temperatures for rearing of salmon and trout in the summer. The standard maximum is 64° F. This was exceeded several summers between 1986 and 1995 with a high seven-day average of 74.3°F. These water temperatures can be attributed to a combination of factors including: low summer flows, water withdrawals, wide and shallow channels, river orientation, geology, and lack of vegetative shading due to the river's width, and warmer tributaries entering the river upstream and within the HRA.
2. High pH values (above the maximum standard of 8.5). Between 1986 and 1995, the highest measured pH was 8.9. This may be attributed to natural solubilized minerals or a certain type of algal influence.
3. Fecal coliform counts too high for water contact recreation in the summer. The maximum standard is 400 colony forming units (cfu). Between 1986 and 1995, the maximum measured value was 1,100 cfu. This may be due to influence of septic systems, livestock near the river, or sewage treatment plant discharge upstream from the HRA.

From 1986 to 1995, the DEQ took a total of 26 water samples from the Rogue River, just downstream of Robertson Bridge. Of the 26 samples, three tested above the threshold of 400 bacteria per 100 milliliters. The maximum value was 1100. Water contact recreation, which encompasses many of the recreation activities in the HRA, was the use criteria for the summer bacteria. Fecal coliform (1996 standard) has limited association with incidence of human gastrointestinal illness and was the measure used. From the fecal coliform group, *E. coli* correlates better with gastrointestinal illness from swimming and other water contact sports (Rosen 2001). For Water Quality Limited, 303(d), listed streams, the DEQ is required to complete Water Quality Management Plans (WQMP). In preparation for the WQMP for the Rogue River, water sampling and testing of the middle and lower Rogue River will occur in the summer of 2003 (Matzke 2002). The Lower Rogue WQMP, including the Hellgate Recreation Area, is scheduled for completion in 2003 (see Chapter 1, Relationship to Other Policies, Plans, and Programs).

Anecdotal information relates incidents of illness and infection from exposure to the water in the Rogue River. The existing condition may be at significant levels. However, the kind and amount of data collected suggests that more data is needed to better understand the degree of contamination by organisms (*E. coli*) that have a more direct relationship with incidents of human illness and infection.

Water clarity is the most visible sign of water quality and reveals if there is a high concentration of suspended sediments. Sediment concentrations and resultant turbidity are the water quality attributes most readily and frequently influenced by natural events and human activity. Forestry practices and roads outside the planning area may influence the amount of sediments entering the tributary streams. Improved methods for road design, location, and construction have greatly reduced sedimentation from this source.

Water Quantity

Stream flow fluctuates with seasonal variations in precipitation. Approximately 80 to 90 percent of annual water yield in the Rogue basin occurs during the 6-month period from December through

May. Runoff during this period varies from small increases in stream flow to major floods. Precipitation, water yield, and stream flow vary across the basin.

The summer low flow period occurs from July through October and reflects the low rainfall during this period. Below normal precipitation in the Rogue basin from 1985 through 1992 has contributed to extremes in low flows. Watersheds without regulated stream flows experience very low summer flows. The Oregon Water Resources Department recognizes water supplies are inadequate in many areas during time of need. The time of greatest water demand occurs during the summer months when there is a high need for water for irrigation, recreation, domestic use, road construction, and power generation. This is also the time of lowest water yield.

The Lost Creek Dam began to control the flow of water from the upper portion of the Rogue River basin in 1977. Statistics from 1978 through 1999 show the annual mean flow as being 3,367 cubic feet per second (cfs). The highest annual mean flow was 5,276 cfs in 1984, while the lowest annual mean flow was 1,538 cfs in 1992. The highest daily mean flow occurred on February 18, 1983, at 50,400 cfs while the lowest daily mean flow occurred on October 8, 1992, at 876 cfs. There were 33 consecutive days in 1992 when the river level was at 1,050 cfs or less (July 9-August 10).

In late December 1996, high amounts of precipitation occurred and as 1997 began, warm temperatures caused mountain snow to melt. This resulted in the New Years Day Flood of 1997. For the Rogue Basin, flood levels varied significantly. Some areas, like Lithia Creek (a tributary of the Rogue), experienced near 50-year flood levels, but in other areas flooding was far less. In Grants Pass, the Rogue River crested at roughly 90,800 cfs. Without river flow regulation by Lost Creek Dam, it is estimated flow would have peaked at around 109,000 cfs. In Grants Pass, the flood was approximately a six percent event or 16 to 17 year flood (Donner 2001).

Although Lost Creek Dam controls the timing and amount of water released into the river on a daily basis, seasonal precipitation determines the amount of water available to be released annually. Withdrawals for agricultural and domestic use affect river flows during the naturally low flow periods. Concern over anadromous fisheries prompted the U.S. Army Corps of Engineers to adjust the water release schedule in 1994 and 2001. In 2001, releases were adjusted according to air temperatures in Medford. As air temperatures warmed, more water was released in order to cool water temperatures as far down stream as Agness. This effort was thought to be successful in terms of high numbers of healthy spring chinook salmon progressing upstream beyond Gold Ray Dam. Raising river flows during the migration periods may mean lowering flows during nonmigration periods, depending on the level of water stored behind the dam. As a result of this flow adjustment, river users in the Hellgate Recreation Area may be adversely affected, especially in years of extremely low precipitation.

Riparian Areas, Wetlands, and Flood Plains

Riparian Areas

Riparian areas are lands directly influenced by permanent water. They have visible vegetation or physical characteristics reflective of permanent water influence. Lakeshores and streambanks are typical riparian areas. In the Hellgate Recreation Area, the riparian area is the strip of land along the riverbanks where vegetation type and abundance is directly influenced by the river.

The riparian areas along the river vary in condition, depending on the characteristics of the riverbanks. Much of the riverbanks consist of alluviated cobbles, gravels, and sand that gently slope away from the river. Vegetation on these sites consists of black cottonwood, Oregon ash, and

willow. The ground covers in these areas are primarily annual grasses and forbs. The other main type of riverbank noted is where the river has cut into the lower river terraces resulting in steep cutbanks nearly eight feet high. The cutbanks are often covered with wild blackberries or young willow stands. This riverbank type is very susceptible to erosion, but comprises a small fraction of the total riverbanks in the HRA (Klingeman et al. 1993). Above the immediate riverbanks and along the lower river terraces, the riparian areas consist of riverwash and sandy loam soils that have a hardwood/conifer vegetative type with some annual grasses and forbs.

Wetlands

Wetlands are areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support vegetation typically adapted for life in saturated soil conditions. Wetlands include marshes, shallows, swamps, lake shores, bogs, muskegs, wet meadows, estuaries, and riparian areas.

Wetlands identified in the Hellgate Recreation Area are Flanagan Slough and an area near Whitehorse Park. These wetlands are relatively small in area, ranging from one to three acres.

High winter flows contribute to the structure and condition of these wetland areas. Much of the wetland areas have been impacted by human activities, such as mining or recreation access. Some wetlands are being reduced in size as low river flows diminish water supplies.

Riparian-Wetland Areas

Riparian-wetland areas are those areas of vegetation that border the Rogue River. When a riparian-wetland area is healthy and functioning, its vegetation contributes to improved water quality and the removal of sediment. In addition, riparian-wetland areas aid in rebuilding flood plains and reducing erosion of streambanks by acting as a sponge to hold water, which is then released slowly. This process not only offsets erosion but maintains instream flora and fauna, and improves ground water reserves.

Approximately 900 acres (11 percent) of the Hellgate Recreation Area are riparian-wetland areas. Most of these are contained in riparian areas along the banks and flood plains of the river.

A healthy riparian-wetland area provides water and soil that increases vegetation. It supports a diversity of insect, mollusk, and crustacean species that are key resources in the food chain. A healthy riparian-wetland area provides nesting, roosting, cover habitat, and food sources for a variety of terrestrial and aquatic animals. It provides migratory routes for many waterfowl and other bird species.

Recreationists benefit from the shade and scenery provided by healthy riparian-wetland areas. These areas accommodate a variety of recreational opportunities, including fishing, water sports, picnicking, camping, and wildlife viewing. Many water users benefit from the improved water quality the riparian-wetland areas provide.

Lack of flood conditions have allowed the riparian vegetation to become well established along most of the Hellgate Recreation Area corridor. The construction of dams and the drought in the 1980s and early 1990s are responsible for the absence of flooding during that period. The 2001 water year was also very dry with typical precipitation at roughly 50 percent of average for the area.

Flood Plains

Flood plains are the lands along a river that are inundated with water during a flood. Flood plains function to temporarily store floodwaters, thereby reducing the risk of downstream flooding. These areas also provide safer slackwater habitat for fish during high flows. Flood plain characteristics that reduce stream velocity are standing and downed trees and other vegetation that create a rough flood plain surface. The flood plains in the Hellgate Recreation Area exhibit the aforementioned characteristics and are classified as being in good condition.

There have been two major floods in the Hellgate Recreation Area within the last 140 years. The last major flood occurred in 1964; the worst flood on record occurred in 1861. Statistics show that in any year there is approximately a 2 percent chance of another flood as large as that of December 1964. The chance of a flood such as that of 1861 is estimated to be approximately one percent in any one year. It must be noted that floods larger than the one in 1861 could occur, major floods could occur in two or more consecutive years, and more than one major flood could occur in any one year.

Executive Order No. 11988 requires that the BLM take action to reduce the risk of flood loss; to minimize the impacts of floods on human safety, health, and welfare; and to restore and preserve the natural and beneficial values served by flood plains. In the Hellgate Recreation Area, the BLM has preserved functional flood plains by maintaining the vegetative conditions in the flood plain through management practices and administration of the scenic easement program. Although the chance of having a flood of the magnitude of the 1964 flood has been somewhat reduced due to the construction of the Lost Creek and Applegate dams, the potential for future damages are not necessarily reduced.

In January 1997, the Hellgate Recreation Area experienced a major flood. The riparian vegetation was in excellent condition and effectively protected the lands from erosion and other major damage. The flood waters deposited new soil over much of the flood plain, which resulted in lush growth of vegetation during the spring of 1997. As a result of the newly deposited rich soil, the blackberry responded with a surge of growth covering more area than prior to the flood. Consequently, the flood alone did very little to control the blackberry in the area.

Botanical Resources

There are five distinct vegetation communities within the Hellgate Recreation Area of the Rogue River. All of these communities are shaped by the climate and geology of the broader southwestern Oregon region. This area is significantly drier than further north and geologically it is an extremely complex mix of soils and rock types. There are occasional intrusions of serpentine rocks and soils, which contribute significantly to the vegetational characteristics of the area. This high diversity of plant communities is an important factor contributing to the large number of special status plants in the area.

Vegetation Communities

Mixed Evergreen

The mixed evergreen forest is the most common forest type of the Siskiyou Mountain region. It is found in areas that are relatively warm and wet during the winter and hot and dry during the summer months. Douglas-fir and tanoak are listed as the most important trees in this regime with madrone and oaks becoming more important in the drier areas (Franklin and Dyrness 1984).

Douglas-fir and tanoak plant communities line both sides of the Hellgate Recreation Area, downstream of Robertson Bridge. The most common plant associations found are Douglas-fir/canyon live oak-poison oak and Douglas-fir/black oak-poison oak on southerly aspects, and Douglas-fir/tanoak/canyon live oak or tanoak/Douglas-fir/canyon live oak-dwarf Oregon grape on northerly aspects.

The forest found upstream of Robertson Bridge is similar, with more ponderosa pine and less canyon live oak or tanoak. Typical plant associations include Douglas-fir/dry shrub (manzanita, buckbrush), Douglas-fir/ponderosa pine-poison oak and Douglas-fir/black oak-poison oak.

Oak Woodlands

Interspersed throughout the length of the Hellgate Recreation Area are areas characterized by an open canopy of deciduous oaks and grasses. These areas have shallower soils, and therefore, they are drier sites than the surrounding mixed evergreen forests. White oak dominates with black oak along transition zones between the woodlands and forest. Plant associations are either white oak/Douglas-fir-poison oak on wetter sites, where more tree species diversity exists, or white oak/hedgehog dogtail grass on drier sites where only white oak is in the overstory. Grasses found in these oak woodlands tend to be non-native due to heavy human influences in the vicinity.

Riparian

The riparian corridor along the Rogue in this section is a mixture of river cobble, native riparian forest, small wetlands, sloughs, and highly disturbed areas, such as old agricultural fields. Willows are found immediately adjacent to the water while large cottonwoods and Oregon ash dominate the flood plains. Alders are also present, as well as bigleaf maples higher up on the banks. Large ponderosa pines sometimes occur on the larger flood plains of the river. Disturbed areas have been invaded by purple loosestrife, Himalayan blackberry, teasel, common tansy, campion, poison hemlock, burdock, and such agricultural plants as hops and fruit trees.

The drainages coming into the Rogue in this section, especially those downstream of Robertson Bridge, are lush with native riparian vegetation dominated by Douglas-fir, bigleaf maple, Oregon ash, and a diversity of ferns.

Serpentine

Serpentine is a term used to cover soils and vegetation that have been influenced by the unique chemical composition of the parent rock. Serpentine soils have been developed from ultramafic rocks or rocks that have high amounts of magnesium and iron, but low amounts of calcium. Serpentine soils give rise to distinct vegetation communities consisting of those species that can successfully compete in these fairly harsh conditions. Serpentine communities consist of many endemic species (species restricted to serpentine soils) that, due to a limited amount of habitat, are considered rare. The Klamath-Siskiyou eco-region especially harbors a high number of these species. They have evolved to adapt to these soils and do not exist anywhere else outside of the eco-region. The Hellgate Recreation Area has such serpentine areas, especially in the vicinity of the Hellgate Bridge.

Rock Outcroppings/Cliffs

As the canyon walls steepen, rock cliffs (both serpentine and other parent rock) dominate the landscape, especially from the Hog Creek Boat Ramp downstream to Grave Creek. Many of these rock outcroppings feature plant species such as the Oregon cliff brake, penstemmon, lewisia, maidenhair fern, and yerba santa. Recent surveys have found a unique assemblage of moss species, as well.

Federally-Protected Plant Species

Although currently not found along the river corridor in the Hellgate Recreation Area, Gentner's fritillary (*Fritillaria gentneri*) is listed endangered under the Endangered Species Act. It is found in the oak woodland vegetation regime and its closest population to the planning area is within a mile of the Rogue River near the city of Grants Pass. Preliminary surveys were done for this species around all developed zones within the planning area. No populations were found. If populations are found, when future projects are surveyed, the BLM would consult with the US Fish and Wildlife Service on the proper protection of the populations.

Special Status Plants and Other Species of Interest

The rare plant species found within the Hellgate Recreation Area have been summarized on Table 3-2. Many of the species in the table are considered rare at the state level. They are given the BLM ranking of Bureau Sensitive or Bureau Assessment and are considered Special Status. Those with Bureau Tracking ranking (and less threatened global and state rankings) are considered of special interest by the BLM. These species tend to have little known about them, have taxonomic questions, or are on the edge of their ranges. Northwest Forest Plan species under Survey and Manage guidelines are considered uncommon within the range of the northern spotted owl.

Species Range and Habitat Information

Rogue Canyon rockcress, Rogue River stonecrop, Howell's lewisia, and two moss species (*Funaria muhlenbergii* and *Pseudoleskeella serpentinense*), are found in the rock outcroppings and cliffs in the lower reaches of the Hellgate Recreation Area. Rogue River stonecrop is the rarest species within the planning area, because its entire range is on the serpentine soils of the Rogue River canyon and the slopes above. Rogue Canyon rockcress is also quite rare, but can be found throughout the Klamath-Siskiyou eco-region. It is not limited to serpentine. Similarly, California maiden-hair, is found on steep, rocky areas of both serpentine and non-serpentine parent materials. So far, the *Funaria muhlenbergii* population within the planning area is the only known site in the Grants Pass Resource Area. It is uncommon, but does have a range north into British Columbia. It is not limited to serpentine soils. *Pseudoleskeella serpentinense*, on the other hand, is a moss that is limited to serpentine, hence its range is limited to the Klamath-Siskiyou eco-region.

This is true for the other plants found on serpentine soils within the planning area. Waldo rockcress, Koehler's stipitate rockcress, Siskiyou fritillary, Opposite-leaved lewisia, and Douglas' monkeyflower also have a range limited to the serpentine soils of the Klamath-Siskiyou eco-region. These species grow on rocky, sparsely vegetated serpentine openings, but usually not on rock outcrops like the species mentioned in the paragraph above. Potato bulb Bolander's onion grows in similar habitat, but is not limited to serpentine.

Howell's camas is unique in its distribution, because it is only found on the serpentine in the vicinity of Grants Pass and the Rogue River, but not further south in the eco-region. It can grow in serpentine grasslands or savannahs where vegetation cover, such as grasses, is higher. Similarly, Howell's microseris, can be found especially in serpentine savannah, but this species does range further south in the Klamath-Siskiyou eco-region.

Chaparral species along the Rogue River occur in serpentine and also can be found encroaching onto oak woodlands. Ponderosa or Jeffrey pine, manzanita, and buckbrush are habitat for two lichen species, *Bryoria tortuosa* and *Sulcaria badia*. *Bryoria tortuosa* is more common than the other species. Both species appear to have their source populations in the crowns of pines, with propagules scattered among the shrub layer. The deterioration of brushfields with these species is occurring due to lack of natural fire in the planning area.

Riparian species of interest include Santa Barbara sedge and California smilax. Santa Barbara sedge has a range mostly in California. The northern limit of its range is the Umpqua River and it has only been found on Medford District BLM lands along the Rogue River. California smilax is an uncommon component of riparian forests within the planning area. Its range extends south into California.

The mixed evergreen forest along the Rogue River harbors several interesting species. Clustered lady's-slipper is found in more mature forest on northerly facing slopes with moist microsite conditions. This orchid ranges north and into Idaho, but has never been a common component of northwestern forests. Its population numbers are quite small when found. It is a long-lived species that can remain dormant for up to 15 years after germination. *Buxbaumia viridis* is a moss found in older forests on downed logs, which are in late stages of decay.

Western sophora grows in openings in serpentine-influenced forests. This species is quite rare, but its few populations can be extensive near the Rogue River in the vicinity of Galice Creek, along Pickett Creek, and on a small piece of the Kalmiopsis wilderness. This species will move into openings created by disturbance, such as skid trails. Stipuled trefoil is a similar species that prefers openings either created naturally or by human disturbance.

Fisheries

Populations

Population trends of fall chinook originating from the mainstem Rogue River have fluctuated; however, they have generally increased over the decades. The average fall chinook population prior to 1991 was 45,000 fish annually in the Rogue River. Fourteen percent of the population occurs in the planning area. The overall fluctuation in the Rogue River population is from 4,000 to 95,000 annually. This indicates that the planning area population may fluctuate as well (ODFW 1994).

The period between October 1 (sometimes September 15) and April 30 is critical for adult spawning fall chinook, eggs, and fry near the redds.

The Hellgate Recreation Area is a migration corridor for salmonids. Fall chinook are the primary salmonid using the area. Other salmonids, such as coho salmon, steelhead, and trout, migrate and spawn in tributaries of the Rogue River.

A variety of fish species inhabit the Hellgate Recreation Area (see Table 3-3).

Present Salmon and Steelhead Habitat

In the 1900s, the number of irrigation diversions increased and water rights on streams were over-appropriated for agricultural use. Timber harvest and forest road construction accelerated from 1960 to 1990. Both of these land-use practices decreased available habitat for coho salmon and steelhead in the tributaries. Many tributaries of the Hellgate Recreation Area have intermittent flows in the late summer. Irrigation of farmlands dewater the tributaries and prevents juvenile coho salmon and steelhead from upstream and downstream migration to seek cool water.

Fall chinook habitat in the Rogue River Basin, and especially the Hellgate Recreation Area, is in good condition. Dams located upstream have improved riverine water temperature, especially for migrating spring chinook salmon. Life history and habitat type for spring and fall chinook salmon

are nearly identical. Migrating adult spring and fall chinook salmon require a water depth of at least 0.8 feet and a water velocity less than 8 feet per second. Spawning adults utilize substrate 0.5 to 4 inches in diameter where minimum water depth is 0.8 feet and velocity is 1 to 3 feet per second (Bottom et al. 1985). Spawning activity covers eggs with 3 to 12 inches of gravel (Bell 1986). There is relatively little suitable spawning habitat in the 14.1 river miles in the Dunn Reach. The major spawning habitat in the Rogue River for fall chinook is between Lathrop Landing and Hog Creek. Spring chinook migrate through the Hellgate Recreation Area to spawn in the upper reaches of the Rogue.

Juvenile chinook progressively move from areas of low water velocity over sand, silt, or small rock substrate near the stream margin to deeper, slightly faster water as they grow (Everest and Chapman 1972). Chinook juveniles follow the shoreline during emigration, primarily at night, and enter the ocean from July through October after less than one year of freshwater residence (Cramer et al. 1985). Spring chinook fry complete their emergence from gravel redds in the Rogue River by mid-May (Satterthwaite et al. 1992).

Wild coho salmon adults hold in the mainstem Rogue River until rainfall raises the flow of tributaries sufficient for them to enter. Several streams in the Hellgate Recreation Area, including Taylor, Jumpoff Joe, Limpy, and Dutcher creeks, support small runs of naturally-spawning coho salmon (MacLeod 1992). Coho primarily spawn and rear in the river's tributaries. Adults spawn in low gradient riffle areas over small gravel. Fry emerge from the gravel between late March and early June (ODFW 1991b). After hatching, most juveniles spend approximately 15 months in their natal stream, preferring pools and slack water areas associated with wood, undercut banks, and overhanging vegetation in tributaries. Migration to the Rogue and the ocean occurs from May through early July, usually peaking in early June (see Figure 3-6).

Steelhead spawn primarily in the tributaries and prefer smaller substrate than chinook salmon and shallow, slow water at the stream margin. Summer steelhead adults and sexually mature half pounders (approximately five percent of the total annual population) enter streams to spawn from January through March. Winter steelhead spawn in 11 streams within the Hellgate Recreation Area. Many spawning streams are small and become intermittent or dry during the summer, yet support summer steelhead.

Steelhead alevins remain in the gravel several weeks until the yolk sac is absorbed and soon after, emerge as fry. Steelhead fingerlings prefer small riffles in the tributaries and move to pools almost exclusively as streams become intermittent or when stream flow is nil during the summer. Fry emigrate from their natal streams to the mainstem Rogue River from March through July where they rear within a short distance downstream. Juveniles frequently move between the river and tributaries, especially during winter freshets, apparently to avoid turbidity and high water velocity. The majority of wild summer-run juveniles smolt during their second year and emigrate to the ocean between April and June. The 150,000 summer-run steelhead smolts produced annually by Cole M. Rivers Hatchery (ODFW 1990a) also pass downstream through the Hellgate Recreation Area during these months.

Fall Chinook Spawning Areas

Major fall chinook spawning areas have been recognized by the BLM in the Hellgate Recreation Area (see Map 3-1). These areas are large in size and are in close proximity to areas of high angler use. The areas are Applegate Riffle, Whitehorse Riffle (including the area at the Whitehorse Boat Ramp), Finley Bend, Panther Chutes, Wharton Riffle, Brushy Chutes, lower Banfield Chute, Robertson's Riffle, High Banks Riffle, Pickett Riffle, Peach Riffle, Weatherby Riffle, Two-Bit Riffle, and Jumpoff Joe Riffle. The area by the Whitehorse Boat Ramp varies as a heavily used spawning site from year to year. Some years, fall chinook may spawn heavily in a 2,000 to 3,000-square foot area. Other years, such as 1996, the gravel bars change and little spawning occurs.

Another major spawning area, Eisman Stillwater, is adjacent to the uppermost limit of the Hellgate Recreation Area. Although this area is outside the planning area, it is influenced by regulations enforced within the area.

Threatened and Endangered Species

In 1993, the National Marine Fisheries Service received petitions to list Southern Oregon/Northern California (SONC) coastal coho under the Endangered Species Act. The National Marine Fisheries Service conducted status reviews in California, Oregon, and Washington to determine if listing was warranted. Essential elements of the status reviews included: (1) delineating possible distinct population segments of these species, (2) using available scientific and commercial data to assess viabilities of population segments under present conditions, and (3) determining if listings are warranted. The National Marine Fisheries Service listed wild coho salmon as a threatened species in May 1997.

The Oregon Fish and Wildlife Commission determined on February 22, 1995, that coho salmon would be classified as a State-sensitive species. The Commission concluded coho production capability was not in peril. Further direction by the Commission instructs the Department of Fish and Wildlife to assess coho stock status annually. The State of Oregon's concern about the potential salmon and steelhead Federal listing prompted the Coastal Salmon Restoration Initiative. The Initiative resulted in a plan to conserve and restore salmon, steelhead, and cutthroat trout. The plan emphasizes voluntary rather than new regulatory approaches. Steelhead and chinook salmon are considered not warranted as threatened or endangered as of September 1999 (NMFS 2002).

Summer steelhead in the upper Rogue River are listed by Oregon Department of Fish and Wildlife as "depressed and possibly declining and are of substantial public concern." The combined wild and hatchery run of adults over Gold Ray Dam has generally increased since the 1960s. However, wild fish in recent years comprise approximately 40 percent of the run compared to 80 percent 20 years ago.

Special Status Species

A large group of species have been identified by the USFWS, the BLM, or the State of Oregon as having special status. Current BLM Manual 6840–Special Status Species Policy, states the Bureau will not implement any actions that will result in a sensitive species being listed as threatened or endangered under the Endangered Species Act (1973 et seq.), as amended. The Oregon/Washington BLM's special status species policy (IB 2000-092) includes Rogue River fall chinook and establishes the limitations on adverse impacts to the chinook population. This policy provides the framework to gauge adverse effects to fall chinook from boating and angling activities. Under this policy, the fall chinook population is given the same protection as a threatened or endangered species. This includes no harm or harassment to fall chinook year-round during all life stages, including courtship, spawning, rearing, and migration.

Juvenile and Adult Anadromous Fish Studies

Two major fisheries issues were evaluated and considered in the river planning process. The issues involved motorized and nonmotorized boats producing an adverse impact upon: (1) spawning adult fall chinook salmon and eggs in the nest and (2) juvenile salmon and steelhead rearing and migration. The BLM currently restricts motorized tour boat use after October 1 for protection of spawning fall chinook and eggs in the nest. This restrictive action was prompted by interest from the public and the Oregon Department of Fish and Wildlife, and by inclusion under BLM Manual 6840.

The Oregon Department of Fish and Wildlife's concerns about the impacts of motorized boats were based primarily upon the conclusions from a 1975 New Zealand field/laboratory study. This study indicated egg mortality was due to the pressure exerted downward from motorized boats into the spawning gravel (Sutherland and Ogle 1975). A scientific peer review of the study expressed concern about the study methods used and the resulting conclusions.

A 1988 study on a stream in Missouri demonstrated the physical impact of boats on fish nests. Conclusions from this study showed disturbance to river gravels at depths of 7-10 inches, from 14-foot, 35 hp jet and 15-foot, 20 hp prop boats (Bush 1988). The study indicated a high probability of mortality to any eggs in the gravels. The data used to demonstrate the impact of small jet boats on eggs and gravel in the Missouri study, was extrapolated to reflect the high probability that the larger jet boats used on the Rogue River would cause mortality to Rogue River chinook reproduction during spawning. This is primarily predicated on the considerably larger size and displacement of water by Rogue River motorized tour boats, as compared to the smaller boats used in the previously mentioned studies. Rogue River commercial boats seat 40 or 80 passengers as compared to 3 to 5 passenger recreational boats used in the Missouri study.

A 1992 BLM review of the adult fish and egg issue determined that motorized tour boat use in the Hellgate Recreation Area should be eliminated from October 1 to April 30 because of the presence of spawning and rearing fall chinook. In addition, the decision was based on field observations by the BLM and expert opinions from fisheries scientists from Missouri and Alaska. Representatives of the BLM invited University of Alaska scientists to conduct tests on the Rogue River regarding the pressure caused by Rogue River motorized tour boats on salmon egg nests. The BLM decided in 1993 not to study the effects of boats on adult fall chinook spawning salmon or eggs in the nests, and instead wait for the results of a motorized boat impact study on salmon adults and eggs being conducted in Alaska.

Subsequently, the results of the Alaska research concluded: (1) pressure alone is not responsible for egg mortality, (2) it is the turbulence that moves gravel, and (3) it is gravel movement that kills eggs, either by impacting eggs in place or by displacing them from the redds. The conclusions in the Alaskan study regarding turbulence by small motor boats is applicable to all motor boats on the Rogue River (Horton 1994).

The second major fisheries issue prompted another BLM review, which concluded that a study should be conducted to determine the impacts of all boats on juvenile fall chinook, coho, and steelhead from May 1 to September 30. The BLM solicited peer review from fishery experts about a multi-year juvenile fish study. The study's design and conclusions were reviewed by the team of experts. Based on the review, the BLM funded the Oregon Department of Fish and Wildlife to perform the research.

The research focused on survival, stress, choice of habitat, and susceptibility to predation. The results of the research indicate juvenile anadromous salmonid survival and distribution are not significantly impacted by motorized and nonmotorized boats and major changes in boating operations are not warranted.

During the 1980s, public concern was expressed about the sightings of juvenile salmonids stranded on the Rogue River shoreline in the Hellgate Recreation Area due to motorized boats. This concern was addressed in the juvenile fish study, which determined there was no juvenile salmon or steelhead stranding caused from motor boats. Mostly non-native crayfish were found stranded in low numbers on the shoreline of the Hellgate Recreation Area (Satterthwaite 1995).

Wildlife

Habitat

Wildlife habitats along the Rogue River are divided by land form into two major areas: the Applegate and Dunn reaches. Robertson Bridge to Hellgate is the transition point from the flat alluvial plain of the upper river agricultural environment to the lower river's steep canyon walls and more native environment. Changes in wildlife are evident between the two sections. Heron rookeries and black bear, associated with the more natural, undisturbed habitats, are more likely to occur below Robertson Bridge.

The habitats that exist in the Applegate Reach are located on a broad flood plain that was extensively used for agriculture in the recent past. After the 1968 designation of the Rogue National Wild and Scenic River, land and scenic easements were purchased to protect its natural and scenic qualities. As a result, existing riparian habitats associated with the flood plain of the river were protected from development, and lands once used for agriculture were allowed to revert to a more natural condition. Mesic sites are now vegetated with black cottonwood, willow, and blackberries; the drier sites are dominated by ponderosa pine, white oak, and non-native grass. Up-slope habitats are a combination of oak woodlands and conifer forests.

In the Dunn Reach, the river canyon narrows. In most places, this restricts the riparian vegetation to narrow bands immediately adjacent to the river. Most of the habitat in the Dunn Reach consists of steep canyon walls vegetated with Douglas-fir and canyon live oak. These vegetative communities provide habitat for a variety of species (e.g., turkey vultures, ringtails, cliff swallows, black-tailed deer, black bear, osprey, bald eagles, and spotted owls).

A detailed description of habitats that exist along the Rogue River and its associated uplands is contained in the *Rogue National Wild and Scenic River Wildlife Management Plan* (USDI 1980). Several of the habitats listed in this plan have changed as a result of the actions prescribed by the Wildlife Management Plan or as a result of natural succession. As recommended in the Wildlife Management Plan, the Robertson Bridge peach orchard was removed, seeded, and converted to non-irrigated pasture/grassland. The vegetation groups listed in the Wildlife Management Plan as non-irrigated pasture/grassland are continuing along a successional pattern, which will eventually return them to their climax community. These areas are now dominated by grasses and young ponderosa pine trees. Many of these pine trees are now 6 to 20 feet tall and the stands are progressing toward a pine/grass vegetative community that was probably present prior to European settlement in the area.

Threatened or Endangered Species

Threatened or endangered species are those species listed under the Endangered Species Act (1973 et seq.), as amended (ESA). Listings of threatened and endangered species carry federal mandates for protection through the use of recovery plans and consultation with the U.S. Fish and Wildlife Service (USFWS) prior to any action that may effect a species or its habitat.

Within the Hellgate Recreation Area, three species listed as threatened under the Endangered Species Act may be associated with the existing habitats. They are the bald eagle, northern spotted owl, and marbled murrelet.

Bald Eagles

The Pacific Bald Eagle Recovery Plan identifies tasks needed to achieve recovery throughout the Pacific recovery area. At least two recovery management recommendations apply to the Hellgate

Recreation Area and they are as follows: (a) 1.33 Restrict Human Disturbance at Eagle Use Area (Priority 1), and (b) 1.334 Prohibit Vehicle Traffic at Sensitive Key Areas During Periods of Eagle Use.

Bald eagles use the large conifers along the river for roosting, nesting, and foraging. Currently, there are three known bald eagle nests associated with the Hellgate Recreation Area. Two of these nests are located outside and one nest within the 1/4-mile river corridor. It is likely that all three pairs extensively utilize the HRA for foraging during both the winter and summer months.

Optimum sites for foraging possess the following attributes: large trees for perching, slack water, and large gravel bars. Some suitable foraging sites along the Hellgate Recreation Area include: Rocky Bar, Chair Riffle, Upper Ennis, Stratton Creek, Flanagan Slough, Carpenters Island, Griffin Lane Complex, Finley Bend, and Applegate Landing.

During several reproductive seasons, adult bald eagle pairs have been observed within the planning area in the following locations: Galice, Ennis Riffle, Robertson Bridge, and Centennial Gulch. It is suspected that these birds may represent nesting pairs; however, previous surveys have failed to document nests associated with these pairs.

Bald eagles forage primarily during the early morning and late afternoon, but will forage opportunistically throughout the day. Some research indicates that the early morning hours are particularly critical foraging times (Anthony, Isaacs and McGarigal 1991). For foraging, bald eagles are strongly associated with river corridors and shorelines where they feed on both fish and waterfowl. Chinook salmon return annually to the river to spawn, and consequently die, providing a consistent food source for the eagles during the late summer and fall months. Due to this consistent food source, additional bald eagles, anywhere from two to ten birds, typically move into this section of the river during the winter months.

Northern Spotted Owls

Northern spotted owls are found in old-growth conifer habitats similar to those located within the corridor and associated viewshed of the recreational area. Douglas-fir forest, hardwood/conifer forest, and canyon live oak/Douglas-fir all have the potential to provide spotted owl nesting, roosting, or foraging habitat. Approximately 3,675 acres of these combined habitats occur in the designated 1/4-mile river corridor. There are no known spotted owl nest sites located within the river corridor. However, spotted owls are a wide-ranging species, which undoubtedly utilize the 1/4-mile river corridor of the Hellgate Recreation Area for foraging, roosting, and dispersal.

Marbled Murrelets

Marbled murrelets are small sea birds that use large old-growth trees for nesting. Suitable nesting habitat requires large limbs (6 inches or greater in diameter) that are moss covered or provide a platform for a nest.

Currently, the USFWS considers any old-growth conifer habitat within 50 miles of the coast to be suitable habitat. The entire HRA is within this 50-mile zone. According to the August 1, 1996 programmatic *Rogue River/South Coast Biological Assessment* (USDA and USDI 1996), the area included in the HRA is within Marbled Murrelet Area D, where there are no seasonal or daily operating restrictions for projects that result in disturbance only. This recommendation is based on the low likelihood of marbled murrelets occupying the zone defined as Area D.

Limited surveys for marbled murrelets have been conducted along the Rogue River by the U.S. Forest Service and the BLM. Areas surveyed include the section from near the mouth of the Rogue River to Grants Pass. Marbled murrelets were found along the river to an area just west of the town

of Agness. No murrelets have been found upriver from this point and no marbled murrelets have been detected on the BLM Medford District.

Special Status Species

A large group of species have been identified by the USFWS, the BLM, or the State of Oregon as having special status. Current BLM Manual 6840, states the Bureau will not implement any actions that will result in a sensitive species being listed as threatened or endangered under the Endangered Species Act (1973 et seq.), as amended. A wide variety of special status species are present in the HRA (see Tables 3-4 and 3-5).

Species considered for possible listing as threatened or endangered under the ESA are identified by the USFWS as Federal Candidate Species. There are no wildlife Federal Candidate Species present in the HRA.

Peregrine Falcons

Peregrine falcons were previously listed as federally endangered. On August 25, 1999, they were removed from the listing, but remain state threatened and BLM sensitive. Peregrine falcons nest on large rock outcrops and cliffs. Most of the suitable nesting habitat for these birds is located in the lower HRA below Argo Riffle. Although there are no known nest sites in the HRA, there are nest sites located nearby in the wild section of the river. Peregrine falcons feed primarily on passerine birds and take a wide array of other birds, including waterfowl and woodpeckers. The diverse habitats along the Hellgate Recreation Area provide an abundance of small- to medium-sized prey for peregrine falcons. Because peregrine falcons are a wide-ranging species, they undoubtedly use the recreation section of the river and associated corridor for foraging.

Mammals

Townsend's big-eared bats roost and reproduce in caves, mines, and large open spaces in buildings, such as barns or attics. These roost sites are required for winter hibernation and summer maternity colonies. Because Townsend's big-eared bats often form large colonies at their roost sites, they are particularly vulnerable to human disturbance. Compounding the impacts associated with disturbance, Townsend's big-eared bats are extremely sensitive and will abandon roosts if recreation-associated disturbance becomes excessive.

Several abandoned mine adits are located within the HRA. One of these mine adits is confirmed as a summer roost for several bat species, including the Townsend's big-eared bat. Monitoring of this mine adit indicated that it receives frequent visitation from humans. In order to restrict access to this site, a gate was constructed across the adit entrance. This gate prevents unauthorized people from entering the site and reduces the potential for disturbance to the roosting bats.

Under the Northwest Forest Plan, the following bat species were elevated to BLM sensitive species and survey and manage species: long-legged myotis, long-eared myotis, fringed myotis, yuma myotis, silver-haired bat, and pallid bat. These bat species roost in a variety of habitats, including caves, mines, buildings, tree cavities, tree foliage, loose bark, cracks, and crevices. For these bat species, the planning area provides roosting, reproductive, and forage habitats in the rocky canyons, open water areas, and associated forest. If present, all of the above bat species may use the river as a source of water and as a foraging area. Species that have been documented in the HRA are Yuma myotis, big brown bat, and Townsend's big-eared bat.

Reptiles and Amphibians

The western pond turtle, California mountain king snake, common king snake, and northern sagebrush lizard are the special status reptiles that are currently known to exist in the HRA.

In 1993, the USFWS was petitioned to list the western pond turtle as a threatened or endangered species; however, the listing was denied due to inconclusive information regarding the species. Western pond turtle populations are thought to be declining over much of their range. In part, this decline can be attributed to loss of habitat and the introduction of bull frogs and large mouth bass, which prey on young turtles.

Western pond turtles inhabit the slow or slack water areas of the river and can often be observed sunning themselves on partially submerged vegetation and logs. Reproduction or egg laying occurs on sunny south slopes in clay soils well away from the water. Literature indicates that generally, nests sites are between 10 and 70 meters from water (Holland 1991). Young turtles hatch and winter in the actual nest, emerging from it the following spring to migrate back to water. Predation on turtle nests by raccoons has been verified as a problem in several areas and is likely to occur locally as well. However, extensive data is unavailable on the Rogue River population of pond turtles.

West of the Cascades, populations of northern sagebrush lizards are disjunct and widely scattered. In the Grants Pass Resource Area, small populations exist in areas of serpentine soils and its associated vegetation. In the HRA, northern sagebrush lizard habitat is no longer grazed, and the habitat on serpentine soils seems to be self-sustaining. However, the lack of fire may allow some of the brush habitats to proceed through natural succession, resulting in a loss of available habitat for this species. Northern sagebrush lizards have been sighted in the HRA.

Special status amphibians are the yellow-legged frog and Del Norte salamander. Yellow-legged frogs are most often found in the smaller side streams with perennial flows of clear, cold water or in pools that have a connection to the main flow of the stream. These frogs are sensitive to water quality problems, including increased water temperature and siltation. Road building, mining, timber harvest, and increased ultra-violet radiation have all contributed to population declines and designation of the yellow-legged frog as a special status species.

Del Norte salamanders live in talus slopes under closed canopy forests. These salamanders are part of the Plethodon, or lungless salamander family, and transpire through their skin. As a result, they are very sensitive to temperature and humidity changes. Del Norte salamanders are commonly found in areas of generally deep talus. Deep talus allows the animals to migrate up and down through the substrate as weather conditions change. Rocky canyon areas down river from the Hellgate Canyon area have an abundance of this type of habitat. Most of this area has not been surveyed for the Del Norte salamander, but the habitat appears to be suitable. Surveys have not been conducted for yellow-legged frogs and Del Norte salamanders, but they have been sighted in the HRA.

Other Species

Raptors

The northern goshawk is a large raptor that utilizes mature and old-growth forests as habitat. Goshawks are rare in this portion of the state, but have been observed in the HRA. Goshawk do not often stray into open areas; they prefer to stay under the forest canopy where they forage on birds and small mammals.

Osprey are common along the Hellgate Recreation Area. Osprey are of interest to river users because they provide wildlife viewing and photo opportunities. Osprey and their nests are regular stops for guided trips.

From 1978 through 1994, osprey were monitored in the Hellgate Recreation Area of the Rogue River. Initial surveys in 1978 documented five active nest sites. Surveys conducted every three years since 1978 have shown a steady increase in active osprey nests. The latest survey, conducted in 1994, located more than 40 active nest sites in the planning area (see Map 3-2), although the overall increase of osprey is unknown. Nest locations and numbers change from year to year; actual locations and number may be considerably different now.

Some of the increase in documented osprey nest sites can be attributed to an improved survey technique. Helicopters were used in the later surveys, allowing detection of sites that were farther from the river or well hidden; although, the largest increase in nest numbers has been located adjacent to or within full view of the river.

Osprey return to southern Oregon in March, at which time they begin courtship and nest building/repair. Young birds usually hatch in May and June. Adults forage primarily on the river to provide food for two to four chicks. Young birds fledge in late July through August. After fledging, the young birds learn to forage for themselves along the river. Osprey migrate out of the Hellgate Recreation Area in September and October.

Wading Birds

Great blue herons have been identified for nest site protection (USDI 1995). Great blue herons nest communally in both deciduous and conifer trees, usually close to water. These communal groups, called rookeries, vary in number from two to more than 100 nests. Herons start nesting in late February; young hatch in April and May and fledge in July.

Great blue herons forage primarily at dusk and dawn, but will forage opportunistically during all day and night hours. Adults catch fish from areas close to the nest to feed to their young. The farther great blue herons are from the foraging area, the less efficient they become at feeding their young. This can lead to reduced productivity. Young fledglings also learn foraging skills along stream habitats close to their rookeries.

Some great blue heron rookeries were last surveyed in 2000, and the others were surveyed in 1994 by the Oregon Department of Fish and Wildlife (see Table 3-6). Historic sites that have been abandoned for many years may not have been included in recent surveys. Over time, as many as ten rookeries have been monitored (see Map 3-2).

Gallinaceous Birds

As a result of population declines in the eastern portion of its range, the mountain quail is a special status species; however, mountain quail are locally abundant and are still hunted as a game bird in this portion of the state. Mountain quail prefer brush fields, a habitat that is widespread in the HRA.

Passerine Birds

Western blue birds are secondary cavity nesters and forage primarily over meadows. For nesting, they utilize cavities created by woodpeckers. Both nesting habitat (snags with cavities) and meadow habitat have been lost as a result of logging, fire suppression, and residential development. As a result, there has been a decline in the number of western blue birds. Several natural meadows and many old agricultural fields provide habitat in the HRA for this species.

Woodpeckers

The pileated woodpecker, Lewis woodpecker, acorn woodpecker, and Williams sapsucker are all dependent on trees with some level of heartwood decay that allows for the construction of cavities

for nesting and roosting. Habitat loss as a result of logging has led to a decline in the populations of the pileated woodpecker and Williams sapsucker. The oak woodland areas that are the primary habitat of the acorn woodpecker and Lewis woodpeckers have been destroyed or replaced by residential and agricultural developments. The lower elevation areas in the HRA provide oak woodland habitat and the riparian areas provide cavity nesting opportunities.

Neotropical Birds

Neotropical birds are not listed as special status species, but they are included in this discussion because of widespread concern regarding downward trends in populations and associated habitat.

Neotropical birds are species that breed and raise their young in the U.S. and Canada and then migrate to Mexico, Central, and South America for the winter. Species decline is attributed to habitat destruction in both breeding grounds and wintering areas. Most of the monitoring data has come from breeding bird surveys conducted by the National Biological Service.

In 1995, a Monitoring Avian Production and Survivorship (MAPS) station and a fall migratory banding station were established in the riparian habitat adjacent to the Hellgate Recreation Area. In 1994, fall migratory bird banding sessions were conducted at the same site. Species diversity information is included in Table 3-7. Lands and scenic easements purchased to protect the outstanding qualities of the Rogue River have also protected important reproductive areas and migratory flyways for neotropical migrants and other birds that use similar habitats.

Visual Resources

Visual resources are the visible physical features on a landscape (e.g., land, water, vegetation, structures, wildlife, and other features).

Scenic Quality Classifications

Scenic quality is the relative worth of a landscape from a visual perception point of view. The scenery within the planning area was inventoried during the Medford District's Resource Management Plan process completed in 1995. The rating methodology used in this process was derived from the BLM Manual Handbook H-8410-1 (Visual Resource Inventory) dated January 17, 1986. This inventory process establishes a qualitative measurement of the visual appeal of a tract of land. Scenery is assigned a rating of A, B, or C. The Hellgate Recreation Area's scenery received a Class A rating during the inventory process. Class A scenery denotes a relatively high quality visual scene when compared with similar physiographic features within the region. Classes B and C denote progressively lower quality visual scenes.

The quality of scenery is affected primarily by human-made alterations to the naturally occurring landscape. Roads, dwellings, buildings of any type, timber harvest activities, or other modifications to the land alter the quality of available scenery. Natural occurrences, such as fire, drought, insect infestation, landslides, and floods, also affect scenery.

Scenic quality is subjective. Different viewers will characterize and qualify available scenery according to their individual preferences. In general, most landscape viewers seem to prefer a natural-appearing scene over one that has detectable modifications.

Visual Resource Management

Visual Resource Management consists of the inventory and planning actions taken to identify visual values and to establish objectives for managing those values; and the management actions taken to achieve the visual management objectives. Visual Resource Management (VRM) inventory classes were established by BLM Manual Handbook H-8410-1 (Visual Resource Inventory). Criteria used to determine VRM classes are: scenic quality ratings (see Scenic Quality Classifications), public sensitivity ratings, and distance zone-seen areas. Based on these three factors, BLM-administered lands are placed into one of four visual resource inventory classes. Class I and II are the most valued, Class III represents a moderate value, and Class IV is the least valued. The Congressionally-designated Rogue Wild and Scenic River corridor is VRM Class I. VRM Class I is reserved for special management areas designated by Congress, such as Wilderness Areas and Wild and Scenic Rivers. The VRM Class I objective is to preserve the existing character of the landscape. Some very limited management activities may occur in these areas. The level of change to the characteristic landscape should be very low and not attract attention (USDI 1995).

Motorized Boaters

The Rogue River was first traveled downstream from Grants Pass to the Pacific Ocean in 1915. The first trip upstream from the ocean to Grants Pass was made in 1947. Since that time, improvements in boats and equipment, increases in knowledge and skills, and a growing interest in river resources have boosted an expansion in types of activities and numbers of visitors.

The Rogue River offers a blend of motorized and nonmotorized boating in a setting that is unique in North America. Unlike most rivers in a back country setting, the Rogue River is accessed by different types of watercraft and provides a variety of white water challenges. Recreationists commonly use the river for both motorized and nonmotorized recreation.

Three types of power boat use occur in the Hellgate Recreation Area: motorized tour boats, commercial motorized angling, and private motorized boats. Motorized tour boat (MTB) use is limited, however, MTBs make up the majority of the motorized use. Commercial motorized angling is limited. Private motorized boats are not limited, but their use is not substantial when compared to other uses.

Commercial Motorized Tour Boats

Two commercial motorized tour boat companies presently operate in the HRA. Both are operated by the same individual under two BLM-issued Special Recreation Permits.

The MTBs used on this section of river are relatively large. Hull length ranges from 30 to 42 feet and hull width from 11 to 14 feet. Maximum passenger capacity of the MTBs ranges from 40 to 80 passengers. The boats are powered by two or three V-8 engines and operate at speeds of 25 to 40 miles per hour.

Two general types of trips are provided by the operator: scenic and whitewater. The scenic trips run from Grants Pass to Hellgate Canyon (Applegate Reach) and return, for a round-trip distance of 41 miles. Some of the trips include dinner or brunch at the OK Corral Restaurant. The whitewater trip starts at Grants Pass and ends at Grave Creek, for a round-trip distance of 67 miles, including a stop at The Galice Resort for meals.

Currently, BLM interim permit stipulations limit the commercial MTB operating season from May 1 to September 30 each year. MTBs may operate in the HRA between 9:00 a.m and 8:30 p.m.

(9:30 a.m.-8:30 p.m. September 1 to September 30). The number of trips is limited to 19 round trips per day. These trips are required to travel in groups or runs. The number of runs per day is limited to six. There is no limit to the number of boats in each run, however, 19 total boat trips remains the maximum number of trips that may occur in a day. The typical run has from one to seven boats.

The daily limit of 19 trips is reached infrequently. In 1991, there were 16 days (all on weekends) when all 19 trips were used. Current number of days with 19 trips per day is similar, with 15 days in 1998, 14 in 1999, and 12 in 2000. The typical number of trips on weekdays during the heavy use months of July and August ranges from 10 to 16.

In the 1991 season, 1,661 MTB trips carried 72,856 visitors down the Rogue River. Since 1991, MTB visitor use has fluctuated from a low of 68,058 passengers in 1992, to a high of 76,467 passengers in 2000 (see Table 3-13). The average MTB visitor use from 1991 to 2000 was 72,158 passengers. MTBs allow more recreational users to visit the HRA without adding to the associated environmental concerns, such as litter, fire rings, vegetation trampling, and human waste disposal. The MTBs operate with the most efficient boat to passenger ratio (average of 48 passengers per boat).

Overall, motorized tour boating accounts for more water-based visitors to the HRA than any other use (see Table 3-8). Until 1977, motorized tour boats only operated between Grants Pass and Hellgate Canyon. After completion of Lost Creek Dam in 1977, and as a result, summer water levels generally increased, allowing smaller MTBs to make the trip to Grave Creek. This section has since become a part of the regular excursion operation.

A unique aspect to motorized tour boat recreation is its inherent availability for the disabled, elderly, or any other user group who may not be capable of or willing to experience the river environment through the use of other types of water craft. Thirty-two percent of the MTB visitors indicated that without a jet boat trip, their personal limitations or fear of the river would have kept them from going on the river (Shindler and Shelby 1993). MTB passengers enjoy the boat speed and the 360 degree turns. They also enjoy the emphasis on river wildlife, history, and culture provided by their tour boat guide. School, retirement, and other special interest groups commonly utilize the MTBs to experience the river. MTBs function as the delivery system for these groups seeking the river experience (e.g., wildlife viewing, white water, scenery, and cultural resources).

Demographics

Motorized tour boaters visit the river for multiple recreational experiences. Overall, motorized boaters are of all ages, with a mean age of 46 years. There were more male motorized boaters (61 percent) than female (39 percent). Twenty-four percent of the motorized boaters live within an hour drive of the river (0-50 miles). Only 26 percent of the motorized boaters traveled more than a full day to reach the river (over 500 miles). Motorized boaters are equally as likely to reside in Josephine County (11 percent) as in Jackson County (11 percent) (Shindler and Shelby 1993).

Visitation Patterns

Total annual recreational use levels in 1991 included approximately 73,000 visitors in MTBs (Austermuehle 1995). Most of this use occurred from May to September, with a peak in August for MTBs and May for private motorized boats (see Table 3-8).

Motorized tour boaters are substantially different than either floaters or anglers in the type of trip they make to the Rogue River. The majority of motorized tour boaters (73 percent) have combined

their visit with other vacation activities, indicating a multiple-day trip. Most motorized tour boaters stay at motels (44 percent), campgrounds along the river (15 percent), or with family and friends (11 percent) (Shindler and Shelby 1993).

Thirty-four percent of motorized tour boaters visit the river once a year or more. On average, motorized tour boaters have been visiting the river for 10 years and make 3 trips per year. Forty-seven percent are newcomers on their first trip. Repeat visitors report their use of the Rogue River as remaining the same or increasing (99 percent). Only 1 percent indicated that the frequency of their visits was decreasing (Shindler and Shelby 1993).

Approximately 66 percent anticipated making future trips about as often as in the past. The remainder either did not know what to expect (21 percent) or thought they would return less often (13 percent). These latter groups simply wanted to visit new places and felt the Rogue River was too far from home (Shindler and Shelby 1993).

Ninety-four percent of the MTB passengers visited the Applegate Reach of the Hellgate Recreation Area and 66 percent visited the Dunn Reach. Motorized tour boaters spent an average \$145 per trip, which may indicate their use is incorporated with other vacation activities over a period of several days (Shindler and Shelby 1993).

Motorized Tour Boaters' Perceptions of Existing Conditions

Motorized tour boaters' perceptions of ecological impacts, crowding, preferences for seeing others, encounters, user conflicts, trip satisfaction, and the problems they see all contribute to the social setting (Shindler and Shelby 1993).

Ecological Impacts

The major ecological impacts to the landscape motorized tour boat visitors identified were water pollution (20 percent) and riverbank erosion (20 percent).

Crowding

Seventy-one percent of motorized tour boaters felt there was some degree of crowding, with most rating it slight (27 percent) or moderate (38 percent).

Preferences for Seeing Others

Companions within the same group are an important part of any recreational trip. Motorized tour boaters viewed the river trip as a social experience. More than half (56 percent) enjoyed seeing others, while for 31 percent it made no difference. Thirteen percent were bothered by seeing other parties. That a relatively low percentage were bothered by seeing others reflects the high-density, high-use experience motorized tour boaters have come to expect from the Hellgate Recreation Area. Most motorized tour boaters came to the HRA prepared to meet other groups. This suggests motorized tour boaters fall into three categories based on expectations: (1) those who are content with the social experience offered, (2) those who are indifferent to encounters by other parties, and (3) those who would prefer fewer on-river contacts with groups outside their user type.

Encounters

Two factors that help explain why people feel crowded are their expectations about the number of people they will meet and their actual encounters. In general, motorized tour boaters were unable to accurately predict encounter levels, since most of these visitors were first-time users (47 percent).

Most motorized tour boaters did not believe that meeting more people than they expected warranted any change in their activities. A few boaters (4 percent) became dissatisfied with their trip or decided to go elsewhere next time. Others (17 percent) changed the way they thought about the Hellgate Recreation Area, choosing to see it as less remote. Motorized tour boaters on this river stretch have adapted to high density conditions, a common outcome at popular recreation areas. Rather than be disappointed, visitors altered their pre-trip expectations to be more in line with the actual conditions they found on site.

User Conflicts

This description of user discord was measured by the motorized boater's perception of rude behavior, conflicts among users, and whether other users interfered with their activities. Motorized tour boaters experiencing interference were primarily concerned with crowded conditions (see Table 3-9).

Visitor behavior was not considered rude by approximately 51 percent of the motorized tour boaters, and 33 percent felt it was a minor problem. Sixteen percent of motorized boaters felt rude behavior was either a problem or a major problem. More motorized boaters felt user conflict existed; 42 percent considered this a minor problem and 18 percent viewed it as more than a minor problem.

Twenty-one percent of motorized boaters felt that others interfered with their trip. Motorized boaters viewed floaters as the group most responsible for trip interference (55 percent). Thirty-two percent felt other motorized boats interfered with their own experience.

In summary, user conflicts are moderate to low for motorized boaters, with approximately half of all motorized boaters perceiving that neither user conflicts nor behavior problems exist.

Trip Satisfaction

Visitor-caused impacts in the Hellgate Recreation Area have not deterred motorized boaters from enjoying their activities. Most motorized boaters (86 percent) rated their experience as excellent or perfect. One percent rated their experience as poor/fair, 3 percent good, and 10 percent very good. Increased visitor use levels of all types have had little effect on user satisfaction. Rather than become discouraged, motorized boaters tend to adjust their view of the higher density situation and remain satisfied.

Problem Identification

Conditions approaching problem levels for all boaters were the number of jet boats, motor boat safety, and litter (see Table 3-10).

Among the environmental conditions cited by MTB users were the following: amount of litter (19 percent) and not enough toilets (24 percent). River capacity problems included: too many jet boats (15 percent) and too many rafters/kayakers (15 percent). The social conditions of greatest concern were the need for better handicapped access (25 percent) and use of alcohol (31 percent).

Boating safety was not a major concern to motorized boaters (see Table 3-11). Forty-eight percent said that there were no boating safety problems. Safety concerns that did exist for motorized boaters included: high speed of motorized boats (13 percent), size of boat wakes (11 percent), amount of maneuvering room for motorized tour boats (15 percent), and use of alcohol on the river (21 percent).

Commercial Motorized Angling

Three permits currently exist authorizing commercial motorized angling. These permits allow the use of a jet sled with an engine of more than 20 hp. Two of the permits expired and have not been reissued. Currently, one commercial permittee is authorized to run motorized angling trips in the HRA. Two permits are authorized to run two trips per day during the season of use and the third permit may run two trips per year during the season of use. The season of use is May 1 through September 30. In 1990, a cap was placed on the issuance of commercial motorized angling boat permits, pending the completion of the Hellgate management plan.

Commercial motorized angling in the Hellgate Recreation Area is a minor use activity. From 1995 to 2000, the average number of trips taken per year was three. No use at all was reported in two of those years. The highest number of trips taken during that time period was 10 trips in 2000.

Private Motorized Boats

Private motorized boat use on this section of river is very limited. Class I and II rapids and hidden rocks provide challenges to power boaters that do not have the requisite boating knowledge and skills. Novice boaters frequently run aground or damage equipment on rocks. Generally, private jet boats are used between Grants Pass and Zigzag Creek (RM 19.7), with a few using the entire study reach; most use is between Grants Pass and Robertson Bridge (RM 14.8).

Private motorized boats are used for fishing, sightseeing, and general on-river recreation. Use figures indicate that from 1992 to 1994 there were fewer than 250 private trips per year. This accounts for approximately 3 percent of all watercraft trips (Austermuehle 1995).

Nonmotorized Floaters

Recreational floating in the planning area is accomplished in a wide variety of watercraft, including inflatable rafts, hard shell and inflatable kayaks, canoes, and inner-tubes. The most popular float trip is the Dunn Reach, from Hog Creek to Grave Creek, where there are several Class I and II rapids. Floating in the Hellgate Recreation Area has increased steadily over the last decade (Austermuehle 1995).

Demographics

Overall, floaters were from all age groups, with a mean age of 38 years. There were more male floaters (64 percent) than female (36 percent). Fifty-six percent of the floaters live within an hour drive of the river (0-50 miles). Only 17 percent of the floaters traveled more than a full day to reach the river (over 500 miles). Floaters were twice as likely to reside in Josephine County (36 percent) than in Jackson County (18 percent) (Shindler and Shelby 1993).

Most floaters tended to use the Dunn Reach in the Hellgate Recreation Area because it provided the best accessible whitewater. Party size averaged six people, which was twice the size of other groups. A floater typically spent \$30 for a day trip.

Private nonmotorized float trips were the most popular (85 percent), but substantial numbers of floaters have also participated in commercial rafting and kayaking, as well as jet boating, bank angling, hiking, and camping.

Visitation Patterns

Floaters visited the river for multiple recreational experiences. Their reasons for visiting the Hellgate Recreation Area centered on floating, however, viewing river scenery, observing wildlife, being in a natural setting, enjoying good weather, and being with friends were also important. Floating is associated with the warm weather months. Visitor use levels by nonmotorized floaters and other visitors to the river are identified in the “Visitor Use” section of this chapter.

The majority of floaters (60 percent) made their trip just to visit the Rogue River. They were primarily local residents using the river for day outings, although a number of floaters also camped overnight on the river (19 percent) or stayed with family or friends (18 percent).

Floaters were frequent visitors with almost 80 percent visiting the river once a year or more. On average, floaters have been visiting the river for 12 years and average 5 trips per year. Only 15 percent were newcomers on their first float trip. Repeat visitors reported their use of the Rogue River as remaining the same or increasing (89 percent). Only 11 percent indicated the frequency of their visits had decreased.

Over 70 percent anticipated making future trips about as often as in the past. The remainder either did not know what to expect (9 percent) or thought they would return less often (17 percent). These latter groups felt that the Rogue River was too far from home, too crowded, did not like the use of motorized boats, or felt user behavior was a problem.

Ninety percent of the floaters used the Dunn Reach, and 10 percent used the Applegate Reach because this reach lacks white water. Approximately 79 percent of all floaters used the popular boat ramps at Hog Creek (46 percent), Ennis (17 percent), and Galice (16 percent). Approximately 71 percent of floaters used the Galice (14 percent) and Grave Creek (57 percent) boat ramps for take-out.

Monitoring in 2001 suggests that the number of visitors has declined since 1991. Visitors were counted at Hog Creek Boat Ramp on three Saturdays in August 2001. Average use for those 3 days was 555 people (478 private floaters and 77 commercial users). During that same time period in 1991, average use was 827 people (764 private floaters and 63 commercial users). The result is an overall decline of 272 visitors. One factor in the decline in 2001 may have been the low water flows experienced on the Rogue.

Commercial use patterns showed the same results. Use patterns for the commercial visitors have shown an overall decline since 1991. The number of visitors peaked at 92,325 in 1996 and fell to 82,761 visitors in 2000. The greatest losses in commercial use occurred in guided fishing and guided float trips, however, MTB use increased approximately 10 percent during that same time period.

Floaters’ Perceptions of Existing Conditions

Floaters’ perceptions of ecological impacts, crowding, preferences for seeing others, encounters, user conflicts, trip satisfaction, and the problems they see all contribute to the social setting (Shindler and Shelby 1993).

Ecological Impacts

The major ecological impacts floaters identified were the presence of trash, water pollution, and riverbank erosion.

Crowding

Eighty-six percent of floaters felt some degree of crowding, with most at the slight (24 percent) or moderate (49 percent) levels. Their sense of crowding was not because of other floaters or anglers by watercraft, but because a large portion of them (68 percent) felt jet boats interfered with their trip.

Preferences for Seeing Others

Almost half of the floaters sampled (43 percent) enjoyed seeing others, while for 34 percent it made no difference. Twenty-three percent were bothered by seeing other parties. That a relatively low percentage were bothered by seeing others reflects the high-density, high-use experience floaters have come to expect in the Hellgate Recreation Area. Most floaters came to the recreation section prepared to meet other groups. This suggests that there are three categories of floaters: (1) those who are content with the social experience offered, (2) those who are indifferent to encounters by other parties, and (3) those who would prefer fewer on-river contacts with groups outside their user type.

Encounters

Two factors that help explain why people feel crowded are their expectations about the number of people they will meet and their actual encounters. On average, floaters expected to see 14 parties each day. Roughly one-third of all floaters encountered as many or less than expected, approximately another third encountered more, and the final third did not know what to expect. The acceptable numbers of encounters, or parties seen per day, was high.

Most floaters did not believe that exceeding encounter expectations was serious enough to warrant any change in their activities. Few became dissatisfied with their trip or decided to go elsewhere next time (10 percent). Others (17 percent) changed the way they thought about the Hellgate Recreation Area, choosing to see it as less remote. Floaters on this river stretch have adapted to high-density conditions, a common outcome at popular recreation areas. Rather than be disappointed, visitors alter their pre-trip expectations to be more in line with the actual conditions they find on site.

User Conflicts

This description of user discord is measured by floater's perceptions of rude behavior, conflicts among users, and if other users interfered with their activities. Floaters experiencing interference were primarily concerned with jet boat activity and crowded conditions (see Table 3-9).

Visitor behavior was not considered rude by approximately 40 percent of the floaters; another 40 percent felt it was a minor problem. Twenty percent of floaters felt rude behavior was either a problem or a major problem. More floaters felt user conflicts existed; 44 percent considered this a minor problem and 28 percent viewed it as more than a minor problem.

Thirty-eight percent of floaters felt that others interfered with their trip. Floaters viewed jet boats as the group most responsible for trip interference (68 percent). Over half the floaters felt speed, noise, and boat wakes from jet boat activity interfered with their trip. Ironically, almost half of the floaters (43 percent) also felt their own group interfered with their float experience.

Crowded conditions were a distant second (29 percent) on the floater's list of concerns. User behavior, such as making loud noise, misuse of alcohol, and poor river etiquette, was the third concern (11 percent), followed by safety (3 percent), and user-caused ecological impacts (1 percent).

In summary, user conflict was perceived as high by floaters. Approximately one-third of all floaters felt that neither user conflicts nor behavior problems existed.

Trip Satisfaction

Visitor-caused impacts in the Hellgate Recreation Area have not deterred floaters from enjoying their activities. Most floaters (71 percent) rated their experience as excellent or perfect. One percent rated their experience as poor/fair, 8 percent as good, and 20 percent as very good. Increased visitor use levels of all types have had little effect on user satisfaction. Rather than become discouraged, floaters tend to adjust their view of the higher density situation and remain satisfied.

Problem Identification

Conditions approaching problem levels for all users were the number of jet boats, motor boat safety, and litter (see Table 3-10).

Among the environmental conditions, litter (48 percent) and not enough toilets (41 percent) scored high for floaters. Among the capacity problems, too many jet boats (53 percent) and congestion at put-in and take-out facilities (37 percent) were the primary concerns. The social conditions of greatest concern were motor boat safety (47 percent) and use of alcohol (37 percent) (Shindler and Shelby 1993).

Boating safety was important to floaters (see Table 3-11). Major safety concerns existed for floaters due to the high speed of motorized boats (43 percent), the size of boat wakes (37 percent), the amount of maneuvering room for motorized tour boats (49 percent), and boats passing too close to rafters and other boats (39 percent).

Boat Anglers

Boat angling typically involves the use of oar-powered drift boats. Most boat angling activity occurs in the Applegate Reach, which has superior fishing holes and is easily navigated. Some boat angling occurs using power boats that are capable of fishing a much longer stretch of river without the inconvenience of running a shuttle.

Boat anglers typically spend four hours fishing, covering up to 10 miles of river. Associated activities during the typical boat angling visit include lunch stops on shore and occasional hiking and exploring.

Demographics

Eighty-nine percent of anglers using motorized boats and 74 percent of anglers in drift boats were local residents who visited the Rogue River several times a year and intended to continue to visit in the future.

The typical angler is male, lives within 50 miles of the river, has been a river user for 11 years, and makes approximately 14 trips annually. He is a Jackson or Josephine county resident and spends little (\$20) on each trip. Since boat angling occurs throughout the year, fishing locations are likely to be geared to the season and type of fish. Approximately half reported they have rafted the river; many also hike (28 percent) and camp (32 percent). Peace, solitude, and the quality of the fishing are major reasons for coming to the Rogue River.

Boat Anglers' Perceptions of Existing Conditions

Boat anglers' perceptions are unique among user groups since this activity involves frequent stationary activity at different fishing holes, riffles, and still water stretches. This factor allows the angler a prolonged opportunity to observe particular conditions relevant to resource condition and resource quality. Boat anglers' perceptions of ecological impacts, crowding, preferences for seeing others, encounters, user conflicts, trip satisfaction, and the problems they see all contribute to the social setting (Shindler and Shelby 1993).

NOTE: Unless bank anglers are specified, figures used refer to both boat and bank anglers.

Ecological Impacts

Impacts observed most often by boat anglers include presence of trash, bank erosion, and water pollution.

Crowding

Boat anglers, as a group, felt there was some degree of crowding (86 percent), with 49 percent perceiving that crowding was moderate and 13 percent that it was extreme. Successful boat angling often involves finding the ideal boat location to maximize the chance of catching fish. This being the case, boat anglers are very sensitive to crowding in choice locations and will relocate until a position can be occupied that provides the probability of a catch.

Preferences for Seeing Others

Anglers are often considered the most solitary of the river groups due to their need to find the ideal spot that is not crowded or interfered with by others. All anglers were generally unconcerned about seeing others; 26 percent enjoyed it, 46 percent did not care, and 28 percent were bothered.

Encounters

Actual encounters and those that were expected prior to the boat angler's trip contribute to perceptions of crowding. Thirty-six percent of boat anglers encountered as many or less people than expected and 44 percent encountered more.

When boat anglers encountered more people than expected, it did not cause them to feel dissatisfied with their trip, or cause them to plan on fishing elsewhere in the future. Most simply modified their expectations so that the number of future encounters was compatible with their expectations.

User Conflicts

This description of user discord is measured by the boat angler's perceptions of rude behavior, conflicts between users, and whether other users interfered with their activities (see Table 3-9). Boat anglers experiencing interference were primarily concerned with jet boat activity (57 percent), rude behavior (20 percent), and crowded conditions (14 percent).

Trip Satisfaction

Levels of use, types of use, and user behaviors have had little effect on boat anglers being able to continue to enjoy their chosen activity. Ninety-two percent of boat anglers rated their experience good to excellent, while only 8 percent rated their trip poor to fair.

Rating trip satisfaction among boat anglers can be problematic considering that one of the chief factors of enjoyment and satisfaction for many anglers is success in the catch. Fortunately, the Rogue's relatively numerous fish runs and relatively large fish populations help to maintain the quality of the angling experience.

Problem Identification

Conditions approaching problem levels were the number of jet boats, motor boat safety, and litter (see Table 3-10).

Among the environmental conditions, litter (49 percent) and not enough toilets (40 percent) scored high for boat anglers. Among the capacity problems, too many jet boats (73 percent) and congestion at put-in and take-out facilities (23 percent) were the primary concerns. The social conditions of greatest concern were motor boat safety (57 percent) and conflicts between users (38 percent).

Boating safety was important to boat anglers (see Table 3-11). Major safety concerns exist for boat anglers due to the high speed of motorized boats (73 percent), the size of boat wakes (72 percent), the operation of excursion jet boats (63 percent), and the amount of maneuvering room for motorized tour boats (61 percent).

Bank Anglers

Bank angling occurs throughout the Hellgate Recreation Area. When fish concentrations are high and fishing success is optimum, bank anglers literally line the banks at some of the more popular and productive holes. Crowding does occur at certain locations.

Bank anglers typically spend four to six hours fishing, rarely moving to other locations. An associated activity during the typical bank angler's visit is wildlife observation.

Demographics

The majority (84 percent) of bank anglers are local residents who visit the Rogue River several times a year and intend to continue to visit in the future.

The typical bank angler lives within 50 miles of the river, has been a river user for 10 years, and makes approximately 20 trips annually. Since bank angling occurs throughout the year, fishing locations are likely to be chosen according to the season and type of fish (Shindler and Shelby 1993).

Bank Anglers' Perceptions of Existing Conditions

Bank anglers' perceptions are influenced by frequent stationary activity at different fishing holes. This factor allows the angler a prolonged opportunity to observe particular conditions germane to resource condition and resource quality. Bank anglers' perceptions of ecological impacts, crowding, preferences for seeing others, encounters, encounter norms, user conflicts, trip satisfaction, and the problems they see all contribute to the social setting (Shindler and Shelby 1993).

NOTE: Unless bank anglers are specified, figures used refer to both boat and bank anglers.

Ecological Impacts

Impacts observed most often by bank anglers are the presence of trash, bank erosion, and water pollution.

Crowding

Bank anglers as a group felt that there was some degree of crowding (89 percent), with 51 percent perceiving that crowding was moderate, and 14 percent that it was extreme. Successful bank angling often involves finding the ideal bank location to maximize the chance of catching fish. This being the case, bank anglers are very sensitive to crowding in choice locations and will relocate until a position can be occupied that provides the probability of a catch.

Preferences for Seeing Others

All anglers, who typically desire fishing locations that are not crowded and that are the most desirable for fishing success, were generally unconcerned about seeing others as long as their experience was as ideal as possible; 26 percent enjoyed it, 46 percent did not care, and 28 percent were bothered.

Encounters

Actual encounters and those that were expected prior to the bank angler's trip contributed to perceptions of crowding. When bank anglers encounter more people than expected, it does not cause them to feel dissatisfied with their trip, or cause them to plan on fishing elsewhere in the future. Most simply modify their expectations so the number of future encounters is compatible with their expectations.

User Conflicts

This description of user discord is measured by the angler's perceptions of rude behavior, conflicts between users, and if other users interfered with their activities. Anglers experiencing interference are primarily concerned with jet boat activity (57 percent), rude behavior (20 percent), and crowded conditions (14 percent)(see Table 3-9).

Trip Satisfaction

Levels of use, types of use, and user behaviors have had little effect on angler's continued enjoyment of their chosen activity. Ninety-two percent of anglers rated their experience good to excellent, while only eight percent rated their visit poor to fair (Shindler and Shelby 1993).

Rating satisfaction among bank anglers can be problematic considering that one of the chief factors of enjoyment and satisfaction for many anglers is success in the catch. Fortunately, the Rogue's relatively numerous fish runs and reasonable fish populations help to maintain the quality of the angling experience.

Problem Identification

Conditions approaching problem levels were the number of jet boats, motor boat safety, and litter (see Table 3-10).

Among the environmental conditions, litter (49 percent) and not enough toilets (40 percent) scored high for anglers. Among the capacity problems, too many jet boats (73 percent) and congestion at put-in and take-out facilities (37 percent) were the primary concerns. The social conditions of greatest concern were motor boat safety (57 percent) and the use of alcohol (37 percent).

Boating safety was important to anglers. Major safety concerns exist for anglers due to the high speed of motorized boats (73 percent), the size of boat wakes (72 percent), the operation of MTBs (63 percent), and the amount of maneuvering room for motorized tour boats (61 percent) (see Table 3-11). The overall operation of motorized boats may be a comment on their presence more than over any specific safety item (Shindler and Shelby 1993).

Recreational Opportunities

The Rogue River's outstanding salmon and steelhead trout fishing, its many miles of near natural scenic environment, and its exciting white water boat trips were principal contributors to the Rogue's fame and designation as a national wild and scenic river. The area draws an estimated 700,000 visitors per year. The river is used year-round, however, most use occurs between May and November. A substantial commercial recreation provider industry exists. Current recreational opportunities attract visitors from outside the geographic area. Visitors are willing to travel long distances to recreate in the Hellgate Recreation Area (Shindler and Shelby 1993).

Recreational activities that occur in the Hellgate Recreation Area include, but are not limited to, white water floating, fishing, jet boating, camping, general sight seeing (driving for pleasure, scenery and wildlife viewing, and photography), picnicking, swimming, sunbathing, recreational mining, hunting, and hiking. Boating activities include private and commercial users. Boats commonly used to run the river are: motorized jet boats, drift boats, rafts, kayaks, and inflatable kayaks. Less common float craft include canoes, small lake boats, and inner-tubes.

Outdoor education opportunities abound in the Hellgate Recreation Area. Educational opportunities presently use interpretation tools such as signs, brochures, and web pages. Some river guides provide outdoor education to their clients and the BLM staff at the Smullin Visitor Center at Rand provides information on area recreational opportunities and river use ethics.

Eight sites in the Hellgate Recreation Area provide restrooms that comply with current accessibility standards, as defined by the Americans with Disabilities Act Accessible Guidelines (ADAAG) and Uniform Federal Accessibility Standards (UFAS). Those sites are: Whitehorse County Park, Griffin County Park, Hog Creek Recreation Site and Boat Ramp, Indian Mary County Park, and Alameda County Park. There are three campsite locations that meet current accessibility standards under ADAAG and UFAS; they are Whitehorse County Park, Griffin County Park, and Indian Mary County Park.

Camping

Both developed and primitive camping experiences are available in the Hellgate Recreation Area. The planning area contains approximately 197 developed campsites and 34 primitive campsites, providing camp space for an average of 924 people per night.

In 2000, an estimated total of 58,454 campers visited the Hellgate Recreation Area. Approximately 54,249 visitors (93 percent) camped at the 4 Josephine County Parks: Indian Mary, Alameda, Griffin, and Whitehorse. Another 3,560 visitors (6 percent) camped in the less developed camp areas: Ennis Riffle, Argo Recreation Site, and Robert Dean. An additional 645 visitors (1 percent) camped in primitive campsites.

In 1992, Oregon State University conducted a survey of the three major water-based user groups – motorized tour boaters, floaters, and anglers (Shindler and Shelby 1993). The study found that 45 percent of floaters, 32 percent of anglers, and 23 percent of MTB visitors camped in the Hellgate

Recreation Area. Visitors camping in the planning area probably participated in other forms of recreational activity in the river corridor.

Corridor Areas Open to Camping

Currently, camping is allowed on BLM-administered lands on the right bank from Hellgate Recreation Site to Almeda Park, at Rocky Bar, and along both sides of the river from Almeda Park to Grave Creek. Camping is not allowed on BLM-administered lands above the Hellgate Recreation Site.

Private and public lands are intermixed within the corridor of the Hellgate Recreation Area (HRA). Recreationists often unknowingly trespass on private lands adjacent to public lands. Trespass frequently results in increased fire danger, litter, noise, and vandalism to private property.

Primitive Camping Areas

In the 1980s and 1990s, there was an increase in primitive camping in the planning area. The demand for developed camping has overflowed into the primitive sites that are auto accessible. Two primitive camp areas (Rocky Bar and Lower Hellgate) are accessible by vehicle, boat, and foot. One or two sites are occupied throughout the summer. The remaining primitive camp areas are accessible by boat and foot. Seven of the primitive camp areas are occupied at least one to three weekends in the summer; these sites are Dunn, Lower Hellgate, Stratton Creek, Paint Creek, Upper Ennis, Rocky Riffle, and Tahiti (Brown 1993). The remaining camp areas are suitable for camping, but are primarily occupied as day-use sites.

Recreation site monitoring in 1989, 1990, 1995, and 2000 found the primitive camp areas in fair to excellent condition. Most of the primitive camp areas undergo an annual high water scouring, which washes away litter, trampled vegetation, campfire debris, and poor sanitation conditions. The riparian ecosystem on the Rogue is fairly resilient due to ample rainfall, which allows for rapid vegetative recovery from trampling, and a large percentage of rocky and sandy surfaces where primitive camping is likely to occur.

Developed Camping Areas

Developed camping areas have one or more of the following improvements: toilets, running water, electricity, picnic tables, trash cans, or informational signs. Four developed public campgrounds, on 319 acres, are located in the planning area: Whitehorse County Park, Griffin County Park, Indian Mary County Park, and Almeda County Park. These 4 campgrounds provide 178 campsites, which range from tent and RV sites, to yurts. All four campgrounds have running water and Indian Mary County Park, Griffin County Park, and Whitehorse County Park have showers. These campgrounds are often full to capacity Memorial Day through Labor Day.

Three developed public camping areas with rustic toilets and no running water are located in the HRA: Ennis, Argo, and Robert Dean. Ennis is part of the Josephine County Park system and Argo and Robert Dean are administered by the BLM. These three areas can accommodate approximately 17 camping groups. Ennis and Argo are accessible by road and are often full to capacity on weekends from Memorial Day to Labor Day. Robert Dean is accessible by boat and is utilized many weekends throughout the summer.

During the summer months, demand for developed camping sites exceeds the supply, according to Josephine County Parks Department. The Josephine County Parks Department has instituted a reservation system to handle visitor requests for camping in their parks.

Human Waste Pack out

Human waste pack out methods are required to be used by commercially-guided river users at sites where a public restroom is not available. Private river users are not required to use a human waste pack out method.

Campfires

Fire pans are required year-round for all fires within 400' of the river's edge. Campfire use is subject to all current State of Oregon regulations. Campfires are allowed in the planning area until the Oregon Department of Forestry declares a "regulated-use closure." Of the three levels of regulated-use closures, only Level One has been used in the Hellgate Recreation Area. In Level One, campfires are only allowed in Josephine County campgrounds (see Chapter 3, Wildland Fire Management, Regulated Use Closures). The regulated-use closure is usually in effect during the summer months.

Length of Stay Limits

The length of stay on BLM-administered land is 14 days, unless otherwise posted. Camping is prohibited in any area posted as closed to that use. Occupying any portion of a developed or undeveloped recreation site for other than recreational purposes is prohibited.

Maximum Group Size

There are no limits to maximum group size per campsite on BLM-administered sites.

Day-Use

Day-use recreational activities in the Hellgate Recreation Area include, but are not limited to, white water floating, fishing, jet boating, general sight seeing (driving for pleasure, scenery and wildlife viewing, and photography), picnicking, swimming, sunbathing, recreational mining, hunting, hiking, and horseback riding.

The majority of Hellgate Recreation Area land-based day-use visitors participate in general sight seeing, picnicking, swimming, and sunbathing. Visitors that participate in picnicking, swimming, and sunbathing, separately from other recreation activities, typically use county park access sites and BLM-administered sites for these activities. Most visitors are also participating in another major river recreation activity at the same time, such as boating, camping, and general sight seeing.

Primitive Day-Use Only Areas

Primitive day-use only areas are those sites without improvements. There are 10 primitive day-use only areas in the Hellgate Recreation Area: Flanagan Slough, Brushy Chutes Island, Hussey Lane, Hellgate, North Zigzag, Zigzag, Dunn, Lower Dunn, Bud Lewis, and Bailey Creek (Brown 1993).

Developed Day-Use Only Areas

Developed day-use only areas have one or more of the following improvements: parking, toilets, picnic tables, trash cans, or informational signs. There are seven developed day-use only areas on public land. Developed camp areas, boat ramps, and fishing access areas are also used for day-use activities.

Two of the developed BLM-administered day-use only areas are adjacent to Josephine County campgrounds: Applegate Landing near Whitehorse Park and Griffin Lane Complex near Griffin Park. Two day-use only areas provide river viewpoints along the Merlin-Galice Road: Hellgate Canyon Viewpoint and Hellgate Bridge Viewpoint. Three day-use only areas supply river access: Hellgate Recreation Site, Chair, and the Rand National Historic Site (Brown 1993).

Back Country Byways

Many people take advantage of driving along the paved roads that parallel different sections of the Rogue National Wild and Scenic River. These roads offer access to a diversity of landscapes and attractions. They provide opportunities to view a variety of fish and wildlife in their native habitat, to explore historical attractions, and to photograph spectacular scenery. It is estimated that over 250,000 visitors to the river visit for the purpose of sightseeing or driving for pleasure. These trips may be associated with another recreational activity like boating, camping, or picnicking.

The BLM's Galice-Hellgate National Back Country Byway is a designated 39-mile route that begins at I-5 near Merlin. The road travels through the community of Merlin and past agricultural lands intermingled with forest lands. Eight miles into the route, the scenery changes to a deep river canyon environment. From Hog Creek to the end of the byway at Grave Creek, the river is within view of byway travelers and the byway is within sight and sound of river users. From the community of Galice, the byway splits and heads west from the river into the Siskiyou Mountains. The portion of byway that travels west from the river connects with a USFS Scenic Byway that continues to the Oregon coast. The Galice-Hellgate Back Country Byway is a popular scenic drive for visitors driving for pleasure, along with the many other recreationists using the area. The heaviest use period for the byway occurs from May through October.

Watchable Wildlife Sites

Fish and wildlife resources contribute greatly to the recreational values of the Rogue River. Wildlife is easily viewed in their natural habitat within the Hellgate Recreation Area.

Three Watchable Wildlife sites have been designated in the Hellgate Recreation Area: Whitehorse County Park, Hog Creek, and Hellgate Canyon Viewpoint. Whitehorse County Park is bordered by BLM-administered land. The Siskiyou Chapter of the National Audubon Society maintains trails at the park, specifically for wildlife viewing and bird watching. Hog Creek and Hellgate Canyon Viewpoint offer overlooks where visitors can view wildlife. In addition, Hellgate Canyon Viewpoint provides a dramatic view of Hellgate Canyon. Whitehorse Park and Hog Creek also provide river access and numerous opportunities for other day-use activities.

Firearm Discharge Regulations

Hunting is allowed in the 1/4-mile river corridor in the Hellgate Recreation Area according to Oregon Department of Fish and Wildlife seasons and regulations. However, the discharge of a firearm or any implement capable of taking human life, causing injury, or damaging property is prohibited at any time within 150 yards of a residence, building, developed or undeveloped recreation site, occupied area, or any time across or on any public road, or across or on any trail or body of water whereby any person or property is exposed to injury or damage as a result of such discharge (*Federal Register* Vol. 57, No. 110, 24271-24274). Implements include, but are not limited to, sling shots, arrows, and paint ball guns.

Private lands intermixed with public lands, private homes, developed and dispersed recreation sites, and crowds of recreationists makes hunting difficult in the Hellgate Recreation Area.

Recreational Mining

Recreational mining is one of numerous recreational activities conducted in the Hellgate Recreation Area. One of the appeals of the HRA to the recreational miner is that the majority of this area is closed to mineral entry (see Map 3-4). Those areas closed to mineral entry have been formally withdrawn from the future location of mining claims. Where the area is closed to mineral entry, and few claims exist that were located prior to the withdrawal, the recreational miner does not have to be concerned about obtaining permission from a claimant in order to mine (see Appendix B, Mineral Withdrawals).

Recreational mining activities that are permitted within the HRA consist of in-stream work (panning and dredging). No permits are required and no seasonal restrictions exist for gold panning.

Dredging in the HRA is allowed after permits are obtained from the Oregon Department of Environmental Quality (ODEQ) (0700-J General Permit) and Oregon Division of State Lands (ODSL) (Scenic Waterway Removal-Fill Permit). The Oregon Department of Fish and Wildlife (ODFW) stipulates in-stream work periods for the Rogue River, which are June 15 through August 31 annually. Exceptions or variances to allow work outside that time period must be authorized by ODFW. Dredges may be up to 4 inches in diameter. Suction dredges are restricted to operations below water level and within existing banks. The entirety of the Rogue River that flows through BLM lands within the HRA are open to these activities and no specific sites have been identified or developed for these activities.

Recreational mining is sometimes conducted in conjunction with boating, fishing, or camping activities in the HRA. This activity is considered purely recreational in scope. It is not an industrial activity that contributes to the economy through the production of a commodity or the creation of wage-generating employment.

Public Access

Access, as used here, means the ability of recreationists to reach the areas they wish to use in the Hellgate Recreation Area. Public access to the bed, banks, and upland areas of the river is limited by three factors: the steep topography of the canyon areas, the location of private land, and the present state of the road and trail systems.

Major portions of land in the Applegate Reach are privately owned, therefore, public access in this area is limited to Josephine County Parks and BLM-administered land. In the Dunn Reach, the paved Merlin-Galice Road, part of the Galice-Hellgate National Back Country Byway, parallels the river for its entire length and is the primary provider for public access to county and BLM lands.

Trails

There are presently no designated trails administered by the BLM within the Hellgate Recreation Area. Trails within developed recreation sites at Hog Creek, Rainbow, and Carpenters Island provide river access and are maintained periodically. However, informal trails have been developed through the casual use of BLM-administered lands by anglers, horseback riders, and mountain bikers (see Table 3-12). These trails do not receive any annual maintenance by the BLM.

Within the HRA, the Josephine County Parks Department administers and maintains the Umpqua Joe Trail, near Indian Mary Park, and the Whitehorse Park Nature Trail in Whitehorse Park (see

Table 3-12). The Whitehorse Park Nature Trail loops through BLM and county land and is maintained jointly by Josephine County Parks and the Siskiyou Chapter of the National Audubon Society.

Trail use within the Rogue National Wild and Scenic River corridor is limited in the 1972 Management Plan, which states, “Public use of the trail system, existing and proposed, will be restricted to hikers only.”

Launching and Landing Areas

There are 13 regularly used launching and landing areas in the 27-mile stretch of the planning area. All 13 areas have some level of improvement (toilets, parking, trash receptacles, drinking water, or campgrounds). Ten sites have concrete boat ramps. The highest concentrations of use by white water boaters occur at Hog Creek, Ennis, Galice, and Grave Creek boat ramps during the summer months. Griffin Park and Robertson Bridge boat ramps get the largest concentrations of use during the peak fishing seasons (September through October and January through March).

Approximately 79 percent of all floaters use the boat ramps at Hog Creek (46 percent), Ennis (17 percent), and Galice (16 percent) to launch their trips. Approximately 71 percent of floaters use the Galice (14 percent) and Grave Creek (57 percent) boat ramps for take-out (Shindler and Shelby 1993).

Vehicle Access on Gravel Bars

Off road vehicle access is limited to five sites in the planning area: the gravel bars at Whitehorse Park, Griffin Park Group Recreation Site (just upstream of Griffin Park), Rocky Bar, Argo Recreation Site, and Rand Recreation Site. These areas provide vehicular access for recreation activities, such as camping, fishing, swimming, sight seeing, picnicking, sunbathing, and wildlife viewing. Rocky Bar and Argo Recreation Site allow camping; the other three sites are day-use only. All BLM-administered lands within the one-quarter mile river corridor are closed to off-highway vehicle (OHV) use.

Fees

At present, there are no BLM user fees for private recreational use of the Hellgate Recreation Area.

Commercial outfitters are assessed fees based on their gross revenues through the BLM’s Special Recreation Permit regulations (see Chapter 3, Guided and Outfitter Services).

Visitor Services

Visitor services are primarily methods of providing information to the public on outdoor recreation opportunities, local natural and cultural history, regulations, use guidelines, and safety. The BLM staff provides Rogue River information to the public at the Smullin Visitor Center at Rand, the Siskiyou National Forest Office in Grants Pass, and the BLM Medford District Office in Medford. Visitor services are provided via visitor contacts, presentations, web sites, maps, brochures, flyers, exhibits, interpretive sites, and signs.

The BLM provides an array of information on boating safety, river access sites, day-use areas, campgrounds, boat ramps, recreational activities (such as boating, driving for pleasure, wildlife

viewing, picnicking, and fishing), shuttle services, water level, planning, river use ethics, commercial outfitters, and local historic and cultural resources.

Most boat ramps in the planning area contain a kiosk produced by the Oregon State Marine Board in cooperation with other managing agencies, including the BLM. These signs include information on location of rapids, facilities location, safety, use ethics, and fishing. A kiosk located at the Hellgate Bridge Viewpoint provides information on the Galice-Hellgate Back Country Byway.

The Rand Administrative Site is listed on the National Register of Historic Places. The site consists of approximately 9 acres and includes 12 structures, 9 of which were built in 1933-37 by the Civilian Conservation Corps.

The primary function of the Smullin Visitor Center at Rand is permit issuance for Rogue River wild section boaters. The Visitor Center accommodates a broad range of recreationists engaged in activities within the Rogue National Wild and Scenic River corridor.

Recreation Opportunity Spectrum

The recreation opportunity spectrum (ROS) is a tool used to inventory existing opportunities in the Hellgate Recreation Area. The inventoried area included the 1/4-mile corridor from the mouth of the Applegate River to Grave Creek. The ROS inventory methodology and results are documented in the *Recreation Opportunity Spectrum Inventory Background Paper for revising the Hellgate Recreation Area Management Plan* dated April 1992.

Acreages in the RAMP/FEIS differ from those in the background paper. Since the original inventory, maps have been digitized and put into the Geographic Information System (GIS) and Arc themes; while the original maps and inventory were done manually and acres figured used a dot grid. Also, the original inventory area included the entire view shed from Hog Creek to Grave Creek, while the RAMP/FEIS acres are only for the 1/4-mile river corridor.

There are six standard ROS classes: primitive, semi primitive non-motorized, semi primitive motorized, roaded natural, rural, and urban. For the Hellgate Recreation Area, 249 acres of Urban, 714 acres of Rural, 5,036 acres of Roaded Natural, 39 acres of Semi-Primitive Motorized, and 2,642 acres of Semi-Primitive Non-Motorized were identified, for a total of 8,680 acres.

Boating Safety

The safety of visitors to the Rogue River is of foremost importance to the BLM. As part of the RAMP effort, the BLM identified the need for a technical background evaluation of boating safety risks and conflict issues. The evaluation specifically targeted the interaction between motorized and nonmotorized boat users (WRC 1995).

The objectives were to develop a quantitative assessment of boating safety and conflicts in the Hellgate Recreation Area and to develop safety risk probability estimates. This assessment of safety risks and conflicts was developed using a two-part approach: (1) the physical nature of the channel and hydraulic conditions, the operational characteristics of various craft, and user patterns; and (2) the perception of safety risk situations in the study area, as perceived by members of a focus group.

To realize the study objectives, a risk probability modeling approach was developed for quantifying the levels of boating safety risk and conflict. The estimates of safety risk exposure and conflict probabilities were based on the following: what was known, measurable, and observable about jet boat operations and craft characteristics; observed and measured channel/hydraulic conditions; observed and measured float craft use patterns at specific sites of concern; assumptions about craft operator decision-making; definitions of potential safety risk situations and acceptable craft separation standards; spatial and temporal distribution models of jet boat and float craft activity throughout the recreational day; and seasonal jet boat and float craft use levels.

Safety concerns are in part generated by the disparity between the motorized and nonmotorized craft and other bank, bed, and water recreationists in terms of size, speed, control over safety circumstances, and consequences of contact and near contact situations. Since the early to mid-1980s, the level of recreational use in the study reaches has increased notably. Since 1980, the annual number of MTB passengers has grown from approximately 19,000 to 76,000 and since the mid-1980s the number of individual MTB runs has grown from approximately 330 to 760 annually (see Table 3-13). Most of this use occurs in May to September, with peak monthly use in August (see Figure 3-4). Drift boat angling, which accounts for another 4,500 annual visits, is tied to the timing of anadromous fish runs (see Table 3-14). Typically a peak in drift boat activity occurs in September and October, timed with the fall chinook runs. Wading and swimming typically occur at several county park access sites at very low use levels.

MTBs operate from Grants Pass to below Hellgate Canyon and return (a 41-mile round trip) and to Grave Creek and return (a 67-mile round trip). By permit regulation, the season of commercial MTB operations currently extends from May 1 to September 30. Private jet boats also use the HRA for angling and general on-river recreation. Generally, private jet boats are used between Grants Pass and Zigzag Creek (19.7 miles), with a few using the entire recreation area. Most use occurs between Grants Pass and Robertson Bridge (RM 14.8). General float craft activity occurs between the Hog Creek Boat Ramp and Grave Creek, using a variety of access points for put-ins and take-outs.

Sites of Concern

Sites of concern were identified through a process of field review and aerial photo review of MTB navigational/operational options and line-of-sight limitations. All the rapids and riffles with limited navigational/operational options and visibility limitations were reviewed. Rapids or riffles with unseen channel portions between MTB set-down areas were defined as sites of concern. Also included were some rapids and riffles that had no sight limitations, but had set-down threshold and line-of-sight geometry that indicated there could be circumstances that might limit an MTBs ability to accommodate float craft (WRC 1995).

Sixteen sites of concern were identified. Analysis indicated that at 14 of these sites, situations existed where craft separation thresholds could be inadvertently exceeded and where accidents were possible, even under the best of current operational and navigational circumstances. At these 14 sites, approximately 16 out of 100 jet boat runs could result in inadvertent accidents when float craft are at these sites and not in view of the jet boat operator. Contrary to user perception, the analysis indicated that the average inherent safety risk probabilities of the lower gradient riffles in the Applegate Reach were approximately twice those of the steeper gradient rapids of the Dunn Reach.

This analysis also showed that the inherent safety risks were 37 percent greater under lower flow conditions due to more limited jet boat operational flexibility and narrower channels. The inherent safety risks for upstream jet boat operations were greater than downstream operations due to flow conditions, line-of-sight thresholds, and waiting times at specific sites.

The daily white water commercial jet boat trips accounted for approximately 70 to 80 percent of the total seasonal safety risk exposure of the entire commercial jet boat seasonal schedule. For the entire seasonal commercial jet boat schedule, low flow conditions present approximately 30 percent greater levels of safety risk exposure than do high flow conditions.

Overall, under current operating practices and operating plan regulations, channel/hydraulic characteristics, craft characteristics, and user patterns were such that it would be difficult for potential accident situations to be avoided. The development of those situations was outside the control of craft operators. Actual accident scenarios would be a function of the particular distribution of craft in the potential accident situations, their speeds, and the actions of operators. These results indicated that the existing record of jet boat related incidents and accidents were not reflective of the nature and potential severity of possible future accidents. Due to the present user activity levels, the probability of a major accident is very small.

Problem Identification

During the scoping process for the RAMP, boating conflicts and boating safety were identified as important issues by the public and by local, state, and federal agencies. Public concern had been expressed over the increasing number of river users and the intermingling of diverse types and sizes of watercraft on the Rogue River. These concerns involved both perceived and actual threats to personal safety, as well as competition among users for space or position on the river, increasing the potential for conflict among users (Walker and Littlefield 1993).

Visitor Use

History

The Rogue River, its shoreline lands, and tributary streams have been key natural features in the Rogue Valley since the arrival of the first migrational native peoples over 9,000 years ago. The Rogue corridor has served since that time as a travel route, trade corridor, food source, and habitation site.

Since the arrival of European Americans, the role of the Rogue began to change. First, as a commercial revenue source (through hydro power production, commercial fishing, irrigation, and other uses) and second, as a recreational resource. At this point in the river's history, its capacity for the various consumptive uses began to be tested.

Today, as the level of development along the river and its environs peaks and stabilizes, the dominant use of the waterway is visitors engaging in private and commercial recreational activities. In 1991, 700,000 people visited the Hellgate Recreation Area (Austermuehle 1995).

Current Situation

The variety of river uses of the river within the Hellgate Recreation Area is increasing (Austermuehle 1995) and is the most important factor in the analysis of how different recreational activities coexist in harmony or conflict with each other. User conflict within the Hellgate Recreation Area is one factor propelling the reexamination of water and land use allocations on this federally-managed section of the river. Conflicts among users and competition for unencumbered use of the available water space create feelings of resentment and frustration for certain recreationists. Information gathered from river users indicates that almost half (43 percent) have

experienced interference by others while participating in their particular activity (Shindler and Shelby 1993).

On-water visitor use patterns during the year generally fall within three broad chronological spans. The period of highest visitor use typically occurs from May to mid-September, in conjunction with good weather for floating, the motorized tour boat's operating season, and school vacation (see Figure 3-3 and 3-4). The period of next highest use is from January to March when there is increased boat angling activity associated with the winter steelhead and spring salmon runs (see Figure 3-5). The period from mid-September through December gets the least amount of use (see Figure 3-5) and is recognized as the "fall fishing season." This period of low use is due to inclement weather, holiday activities, and the start of the school year (Austermuehle 1995).

While motorized tour boating accounts for the largest number of visitor use days (see Table 3-8), nonmotorized activity accounts for the largest number of float craft (see Table 3-14) occupying the available river space during the peak use months. This situation creates a physical environment where unpowered downstream boat traffic can conflict with downstream and upstream motorized traffic. Situations where users perceive interference with their activity are most prevalent when this happens.

The most popular river reach for nonmotorized boat use during the peak use season is the Dunn Reach. This section starts at Hog Creek and proceeds down stream to Grave Creek (see Map 1-1). The area where the most user conflicts occur is from Hog Creek Boat Ramp to the Hellgate Canyon. All motorized tour boat trips, including the dinner and lunch runs, travel at least to the bottom of Hellgate Canyon, which puts them in the river channel with the less maneuverable float craft that launch from Hog Creek. The commercial motorized tour boat operator has adjusted launch times to reduce the encounter period between motorized and nonmotorized traffic (Austermuehle 1995).

In many situations, motorized traffic is delayed for long periods of time due to lengthy processions of float craft proceeding down certain channels that are insufficiently large to allow two-way traffic. Mitigating measures, such as the employment of channel observers who radio motorized craft when the channel is clear for passage, are utilized to help alleviate congestion in certain locations. For the most part, however, river users must rely on their own sense of safety and river etiquette to allow safe and timely passage for both types of river craft through constricted river reaches (WRC 1995).

Off-water or land-based use varies considerably with each activity. Driving for pleasure, bicycling, horseback riding, and hiking are a few of the many uses that are not river dependent. These activities comprise a large portion of the total visitor use days.

Bank angling is the dominant recreational activity for those users utilizing the river without float or motorized craft. This use is river-dependent and is affected by other on-water activities. Bank angling amounted to 14 percent of the recreational use of the Rogue's waters in 1991 (Austermuehle 1995).

Bank anglers, as a group, live closest to the Rogue River. Almost three-fourths live within 50 miles of the river and are the most frequent visitors to the Rogue corridor. Anglers in general have shown a low tolerance of interference with their activity. Bank anglers perceive the use of motorized craft, especially motorized tour boat traffic, as a nuisance that they must endure. Noise, interference with fishing lines, and boat wakes are most often the factors of chief concern to this group (Shindler and Shelby 1993).

Passengers on the motorized tour boats and users of private motorized craft have been shown to be the groups least affected by other categories of use and that have been more tolerant of encounters

with others. Factors such as brief encounter times and low encounter frequencies are the primary reasons for the low level of concern among the groups (Shindler and Shelby 1993).

Recreational uses on the Rogue that involve use of the waters within the planning area are those that are most likely to conflict with the uses perceived as more disruptive, such as motorized boating activity.

Law Enforcement/Emergency Services

The Hellgate Recreation Area has overlapping law enforcement coverage by the Josephine County Sheriff's Department, the Oregon State Police, the BLM Law Enforcement Rangers, the U.S. Coast Guard, and the Oregon State Marine Board. This overlapping coverage is not inclusive of all governing statutes, regulations, and laws. Each agency has defined responsibilities and authorities to cover specific law enforcement categories and enforcement situations.

The Josephine County Sheriff's Department provides the most pervasive law enforcement presence within the planning area. Regular Patrol Deputies in vehicles provide first response enforcement of applicable Oregon Revised Statutes relating to criminal activity and vehicular laws. Special Marine Deputies, funded through the Oregon State Marine Board, utilize motorized and nonmotorized river craft in the enforcement of boating safety laws.

The Oregon State Police are primarily responsible for the enforcement of all game laws. State Troopers utilize patrol vehicles and occasionally motorized and nonmotorized craft for on-river enforcement efforts.

The BLM Law Enforcement Rangers emphasize the enforcement of applicable federal statutes, both on land and water. Their primary responsibility is the enforcement of federal laws as they relate to use of the river corridor by commercial recreation providers or other river users violating rules, laws, or restrictions established to regulate use within the confines of the federally-controlled waters or surrounding federal lands. BLM Rangers are also authorized to enforce Oregon State Statutes when necessary.

The U.S. Coast Guard is primarily responsible for enforcement of all rules relative to the use and operation of vessels qualifying for Coast Guard Certification. This limits their involvement to the motorized tour boats and any smaller boat wherein its use requires the operator to have a small craft operator's certificate (commonly referred to as a commercial six passenger license). The Coast Guard's presence on the river is rare and is limited to administrative enforcement of those operators who fall within the scope of their authority.

The Oregon State Marine Board's primary responsibility is to monitor river use relative to boating regulations, stream stretch restrictions, safety signing, and outfitter licensing through the state's outfitter licensing program. Their actual presence on the river is minimal, with their enforcement efforts being administrative in nature. Actual authority for on-the-ground enforcement is contracted out to the Josephine County Sheriff's Department.

When necessary, these law enforcement entities combine for common law enforcement or emergency purposes. An emergency situation, such as a boating accident, may require the services of Oregon State Marine Board, Josephine County Sheriff's Department, and Oregon State Police. Depending on the seriousness of the incident, other emergency services may be included: Josephine County Search and Rescue, Mercy Flights, AMR Ambulance, and BLM personnel. Close coordination provides for the overall law enforcement needs of the planning area.

Guided and Outfitter Services

The planning area is served by over 120 outfitter/guide commercial recreation providers. The number of providers (permittees) varies from year to year. All these providers are authorized to offer commercial services through the authority established for the Special Recreation Permit (43 CFR 8372). Special Recreation Permittees are required to acquire an Oregon State Marine Board Guide's License, have insurance in effect to protect customers and the BLM, and show to the issuing office (Medford BLM) they are capable of providing professional level services. Specific stipulations are attached to the permit to insure all commercial operations are conducted in a safe manner and in full compliance with all applicable state and federal laws and regulations.

The number of permittees and the wide variety of recreational opportunities they offer provides the public with an array of activities that can often be tailored to meet specific needs or desires. The most prevalent commercial activity (based on total use figures) is the motorized tour boat (MTB) trip, which account for over 71,000 passengers per year. Since 1992, MTBs have provided from 79 percent to 92 percent of the total water-based commercial visitor use. This activity is supplied through one permittee based in Grants Pass. The MTB trips are only federally-controlled for the portion of the trip that occurs within the planning area. The portion of the trip that occurs between Grants Pass and the Applegate River (the beginning of the HRA) is governed by state regulations.

To ensure that the public is well-served by permittees, monitoring and administration of each permit is done by the BLM management staff in the field so they can observe commercial activities to determine if all permit stipulations are being followed. At the end of each year's operating season, the performance of each permittee is evaluated. Less than acceptable performance can result in permit probation, suspension, revocation, or other administrative penalties.

The BLM's role in dissemination of information regarding outfitter/guides is limited to providing lists (addresses and phone numbers) to the public of all currently permitted providers. No preferential recommendations are offered by the BLM in the furnishing of such information.

Landowners

There are approximately 190 residences within the Congressionally-designated boundaries of the Hellgate Recreation Area; most are year-round residences. A majority of the residences are riverside properties (see Table 3-15).

Many single family dwellings are located in the first four miles of the Hellgate Recreation Area. The rest of the recreation area has scattered cabins and houses, and open space created through land purchases by the BLM for the purposes of scenic and recreational resource management.

The owner/occupants of these properties, for the most part, choose to live on the river because they enjoy river-related activities or enjoy the river environment and the solitude of the country. Any disruption to this solitude is viewed negatively and as a disruption to the quiet enjoyment of their property.

Landowners' Perceptions of Existing Conditions

Landowners' perceptions of ecological impacts, peaceful enjoyment of property, preferences for seeing others, the sounds of river users, and the problems they see all contribute to the social setting (York, Rowland and Salley 1994).

Ecological Impacts

The major ecological impacts landowners identified were increased riverbank erosion, damage to fish and spawning grounds, and sound pollution.

Satisfaction with Peaceful Enjoyment of Property

Sixty-seven percent of the landowners gave unfavorable ratings to all groups of users, with 45 percent being extremely unfavorable. Private motorized boats received a 37 percent unfavorable rating. Those who rated motorized tour boats to be a significant or major problem in regard to sound, also reported that motorized tour boats are a visual intrusion (93 percent) and disrupt their privacy (86 percent).

Preference for Seeing Others

When asked how much of a problem the sight of each type of user was to the respondent, 56 percent rated MTBs as being a significant or major problem. Thirty percent also rated private motorized boats as being sight problems, while other users received no more than a 12 percent rating in these problem categories.

Sounds of River Users

Motorized tour boats were perceived to be the most problematic in regards to sounds generated (Table 3-16). Sixty-nine percent rated sounds generated by MTBs as either significant or major. Forty-one percent also rated private motorized boats as being the source of sound problems. None of the other users were identified by more than 15 percent of the respondents as being a significant or major sound problem.

Problem Identification

Conditions approaching problem levels were the number of motorized tour boats and concern for ecological damage.

Among the environmental conditions, landowners rated riverbank soil erosion and other ecological damage as high. Regarding the degree to which user types represented a problem to the landowner's privacy, 58 percent of the respondents reported MTBs to be a significant or major problem. Of that 58 percent, 95 percent wished for a reduction or elimination of MTB traffic. Private motorized boats (31 percent) and campers (24 percent) also received notable ratings indicating a problem. No other users were given more than a 15 percent problem rating.

Sound

Public concern was expressed concerning the level of sound associated with the diverse types and sizes of watercraft and the increase in the number of river users in the Hellgate Recreation Area. The Oregon State Marine Board (OSMB) is responsible for regulating sound from recreational motorboats. The sound levels set by OSMB follow: for engines manufactured before January 1, 1993, the maximum noise level, when stationary, is 90 decibels (dB) and for engines manufactured after January 1, 1993, the maximum level is 88 dB. These levels do not apply to motorboats competing under an OSMB permit in a boat race.

In 1993, measurements were taken to compare the levels of sound produced by various sound generators (Walker and Littlefield 1994).

Natural/Riffle Sounds

Natural sounds were measured primarily as a baseline for comparison to sounds from visitors and machines. Three main categories of natural sounds were measured: birds, riffles, and general river sounds.

It was difficult to isolate bird sounds from the background or ambient sounds. Bird sounds ranged from 35.0 dB to 59.0 dB. Most of the loudness measurements were made within the length and width of specific riffles. Almost half the natural sounds measured were Class I and Class II riffles. They had a decibel recording that ranged from a low of 56.0 dB to a high of 83.0 dB, with an average of 70.0 dB recorded. Riffles and other sounds from the river were the only sound generators that emitted continuous sound. General river sounds, with no particular sound generator, measured around 50.0 dB.

Sounds Made by Visitors

Commercial Motorized Tour Boats

Measurements of loudness from commercial motorized tour boats were from three sources: BLM stationary test, Oregon Department of Environmental Quality Rogue River Marathon Jet Boat Race measurements, and BLM pass-by measurements. State of Oregon sound standards for mufflers on private motorized recreational watercraft are not applicable to commercial motorized tour boats. However, these standards were used as a comparative measure. In 1993, 9 of the motorized tour boats in the Hellgate Excursions, Inc. fleet were inventoried for sound levels using the Oregon State Marine Board standards. All motorized tour boats (MTBs) inventoried were within the Oregon State Marine Board standards (Walker and Littlefield 1994).

Recordings of the decibel levels produced by MTBs were made when the boats were being operated in various ways from slow, no-wake conditions to fast, on-plane operations. The pass-by decibel measurements for motorized tour boats ranged from a low of 46.2 dB to a high of 87.6 dB, with an average of 66.5 dB. This range is similar to that of riffles.

Commercial Motorized Angling Boats

Motorized angling boats have approximately the same sound characteristics as private motorized boats. The loudness range was from a low of 48.1 dB to a high of 88 dB.

Hydroplane Boats

Loudness measurements of hydroplane boats were limited. The loudness of two boat runs was measured and ranged from a low of 45.2 dB to a high of 107.8 dB.

Marathon Jet Boat Races

A high range of loudness recordings was made by the Oregon Department of Environmental Quality in 1988. These measurements ranged from a high of approximately 113 dB to a low of 45 dB. In 1997, sound measurements were taken of the unlimited class of jet boats. Levels ranged from 86 dB to 114 dB.

Private Motorized Boats

The loudness range was from a low of 48.1 dB to a high of 88 dB.

Nonmotorized Boats

Nonmotorized boats include inflatable kayaks, paddle rafts, oar-framed rafts, drift boats, catamarans, canoes, and hardshell kayaks. In general, the inflatable kayakers and paddle rafters are the loudest. These visitors usually are in social groups that are more likely to engage in water fights. Drift boats are usually used for angling. Anglers in general are pursuing solitude.

The sound measured was from a range of sources, such as several groups putting in at a boat ramp with associated vehicle sounds in the background to individuals floating by without making any human sounds. The measured low was 45 dB and the high was 79.4 dB.

Sounds Made by Machines

Homeowner Activity Sounds

The loudness of sounds produced by a wide range of homeowner activities was measured. The decibel level of most of the sounds was in the range of those for nonmotorized watercraft (i.e., 45 to 55 decibels), especially during the night hours. Measured homeowner activities included the use of: air conditioners, sewing machines, vacuum cleaners, TVs, dishwashers, washing machines, garbage disposals, lawn mowers, and chain saws. The range of loudness from these machines is from 60 dB to 96 dB.

Machine Sounds

Sound was measured from the following sources: air horn, airplane, car, chainsaw, lawn mower, logging truck, public address system of motorized tour boat, pump, radio, truck, vehicular traffic, and weed eater. The low measurement was 43 dB and the high was 132 dB. A diesel truck may generate 80 to 90 dB, audible at 50 feet. An off-highway recreational vehicle may generate sound levels that approach those of a diesel truck, depending on the type of muffler used, size of engine, and the speed of the vehicle. Chain saws can be heard for great distances. The approximate loudness of a chain saw at 50 feet is 86 dB. A gunshot at 50 feet was measured at 136 dB.

The sound produced by four sources was measured in the Hellgate Recreation Area. They are listed with their low, high, and average decibel levels: airplanes – low 47.1 dB, high 132 dB, average 68.9 dB; lawn mowers – low 50.6 dB, high 61.0 dB, average 57.4 dB; pumps – low 43 dB, high 79 dB, average 60.7 dB; and vehicular traffic - low 49 dB, high 84 dB, average 57.4 dB.

Sound Sensitive Property

Sound sensitive property is defined as private property normally used for sleeping, or as schools, churches, hospitals, or public libraries.

Limpy Creek to Jumpoff Joe Creek was identified as an area with sound sensitive properties (see Map 3-3). The sound sensitive property was identified using a combination of the following: residential zoning, housing densities per river mile, tourist commercial zoning, river community classification, and the Southern Oregon University's survey of landowners residing within the Hellgate Recreation Area.

Property zoned for farm, forest, woodlot, or tourist commercial activities was not considered sound sensitive. The river community of the Galice Subdivision was not considered sound sensitive even though it had a relatively high housing density per river mile (see Table 3-15) and was also zoned rural residential. The rationale was that this area was adjacent to the area in Galice zoned tourist commercial and that a large number of the residential properties had commercial activities occurring on them in the form of home-based businesses.

Landowners

Landowners rated motorized tour boats to be the greatest source of problem sound, with 69 percent rating it as either significant or major (see Table 3-16). Fourteen and one-half percent of the respondents rated campers as either a significant or major sound problem. Anglers received 1.6 percent of responses in the significant or major problem categories. No respondents rated nonmotorized river traffic or hikers as a significant and major sound problem.

Those who rated sound from motorized tour boats to be a problem, generally also reported them to be visual intrusions and an intrusion on their privacy. This tends to indicate that sound cannot be isolated as the only problem that landowners have with river traffic.

Transportation

The main transportation system in the Hellgate Recreation Area primarily consists of State of Oregon, Josephine County, and BLM roads that access BLM, county, and private recreational sites along the river. Generally, BLM recreational site access roads are single lane, crushed rock surface, or natural surface roads that do not exceed one-half mile in length. Hellgate Bridge, Grave Creek Bridge, and Almeda Road (Merlin-Galice Road from about Almeda Park to Grave Creek) are maintained by the BLM.

Light to moderate use of state and county roads occurs November through April consisting mainly of residential and some recreational traffic. Moderate to heavy use occurs May through October, particularly on the weekends, with a significant increase in recreational traffic. Congestion is heavy on the Merlin-Galice Road in the Galice Resort area from June through September.

State and county road maintenance consists of annual roadside brushing, ditch cleaning, and hot patching of the asphalt surface as needed. The BLM roads are maintained as requested by the Rogue River Program Manager, as scheduled by the road maintenance foreman, or as requested by the Resource Area. Roads, bridges, and recreation sites were inventoried to show surface types, road lengths, and maintenance responsibilities (see Tables 3-17 and 3-18).

Quarries

Two existing quarry sites are located adjacent to the Applegate Reach in the Hellgate Recreation Area: Gunnell Quarry (T. 36S., R. 7W., SE1/4 NW1/4 Section 14) and Hog-Jumpoff Quarry (T. 35 S., R. 7W., NW1/4 NW1/4 Section 14). Both quarries are on private land.

Salable Minerals

Salable minerals are those mineral materials including sand, gravel, stone, clay, and other common varieties that may be sold to the public or made available as free use to other federal, state, or local government agencies. Disposal of common varieties is discretionary and meant to be compatible with the land use allocation and not cause unnecessary or undue degradation.

Capacity

The capacity of a transportation system reflects its ability to accommodate a number of people or vehicles. The level of service a transportation system delivers directly effects vehicular capacity

and quality of flow. Capacity and quality of flow are two indices of measuring the need for improvements to an existing transportation system. A maximum total of 2,094 vehicles per hour (peak capacity per hour) in both directions under ideal conditions was adopted as the maximum capacity for the Merlin-Galice Road (Transportation Research Board 1994). The highest peak hourly traffic rate for 1991 was 105 vehicles per hour, and for 2000, it was 100 vehicles per hour. Vehicle use is low compared to the road's potential to handle a maximum total of 2,094 vehicles per hour.

Socioeconomics

Jackson and Josephine counties have been selected as the impact area for the purpose of addressing socioeconomic effects. The Hellgate Recreation Area is located entirely within Josephine County; however, travel and expenditure patterns suggest that the major trade centers of Medford and Ashland are utilized by visitors to the area. These communities are located in Jackson County, making it necessary to include that county within the impact area.

Josephine County is a relatively rural county with approximately 70 percent of the population living in unincorporated areas. Josephine County has two incorporated cities: Grants Pass and Cave Junction. In the 2000 census, population in the county totaled 75,726, with 23,003 living in Grants Pass and 1,363 in Cave Junction (U.S. Census Bureau 2000). Population estimates are not available for the unincorporated communities that are located along the Rogue River and within the Hellgate Recreation Area. Jackson County is substantially more populated; estimated 2000 population totaled 181,269 (U.S. Census Bureau 2000). Jackson County has 11 incorporated cities and towns: Ashland, Butte Falls, Central Point, Eagle Point, Gold Hill, Jacksonville, Medford, Phoenix, Rogue River, Shady Cove, and Talent. Ashland and Medford, both located in the I-5 corridor, are the major trade centers. Less than 40 percent of Jackson County residents live in unincorporated areas.

Tables 3-19 and 3-20 show employment and income by type and industry for Jackson and Josephine counties. This data has been provided to add perspective to the estimates of employment and income generated by the input-output model developed for use in this planning process. The Socioeconomics section in Chapter 4 contains a general description of the model and its use.

The Hellgate Recreation Area is a popular recreation area for visitors and local residents. Visitation for 1997 has been estimated at over 719,000 (Austermuehle 1997). Use by visitors (those traveling more than 200 miles from home to the Hellgate Recreation Area) and residents varied by type of activity (Shindler and Shelby 1993). Visitors represented 58 percent of motorized tour boat users and 32 percent of floaters. Angling use is dominated by local residents, with only 20 percent of anglers traveling more than 200 miles from home. In general, expenditures by individual visitors are higher and have a greater economic impact than those of residents. This is because visitors have a greater propensity to use commercial lodging, dine out, and participate in commercial recreational activities, such as guided floats and motorized tour boating. The economic effect of these expenditures is greater because it represents money earned outside the area entering the local economy and creating jobs and income.

Given the 1997 level of visitation, an estimated 1,713 jobs and \$31.32 million of place-of-work income is generated in Jackson and Josephine counties. Among the ten activity types, motorized tour boating generates the most jobs and place-of-work income and day use is a distant second (see Tables 4-3 and 4-4).

Environmental Justice

Executive Order 12898 (1994) provides that “each Federal agency make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health and environmental effects of its programs, policies, and activities on minority populations and low-income populations.” Environmental Justice “is achieved when everyone, regardless of race, culture, or income, enjoys the same degree of protection from environmental and health hazards and equal access to a healthy environment in which to live, work, and play” (Whorton and Sohocki 1996).

Management Costs

The baseline administrative costs include: MTB permit (\$15,000), commercial motorized angling permit (\$1,000), other commercial permits (\$15,000), special boating events (\$1,000), site maintenance for all existing sites (\$70,000), and miscellaneous administration costs (\$10,000).

Gross Revenue

Commercial Permittees

As part of the stipulations of each Special Recreation Permit issued to commercial recreation providers operating in the Hellgate Recreation Area, regulations and procedures require permittees to report the gross revenues associated with their operations as sanctioned by the permit.

Gross revenues are defined as those fees actually charged to the customer for services performed or delivered on federally-controlled land or waters. These gross revenues may be eligible for certain discounts that relate to time spent off federal land, non-activity based fees, and charges incurred by the customer for services that are not dependent on the privileges granted by the Special Recreation Permit.

After appropriate discounts have been applied, the adjusted gross revenue reported by the permittee is added to the permittee’s annual billing. If no discounts are appropriate due to the particular circumstances involved with the commercial activity, then a billing rate of three percent is applied to the permittee’s reported fees. At the end of the calendar year, all reported fees, minus any applicable discounts, are calculated and the permittee is billed.

Total gross revenues for commercial activity within the HRA averaged approximately \$2,400,000 yearly from 1985 to 1991. From 1992 to 2000, the gross revenues for commercial activity averaged \$5,585,066. After applying appropriate discounts, an average of approximately \$55,000 is collected yearly by the BLM in commercial use fees. Commercial fees collected in the Hellgate Recreation Area in 2000 totaled \$61,638.

Private Use

Currently, there are no BLM user fees collected for private recreational use of the Hellgate Recreation Area.

Chapter 3

Tables, Maps, and Figures

Table 3-1. Fire Regime Condition Classes

Condition Class	Attributes	Example Management Options
Condition Class I	<ul style="list-style-type: none"> • Fire regimes are within or near their historical range. • The risk of losing key ecosystem components is low. • Fire frequencies have departed from historical frequencies (either increased or decreased) by no more than one return interval. • Vegetation attributes (species composition and structure) are intact and functioning within an historical range. 	Where appropriate, these areas can be maintained within the historical fire regime by treatments, such as fire use.
Condition Class II	<ul style="list-style-type: none"> • Fire regimes have been moderately altered from their historical range. • The risk of losing key ecosystem components has increased to moderate. • Fire frequencies have departed (either increased or decreased) from historical frequencies by more than one return interval. This change results in moderate changes to one or more of the following: fire size, frequency, intensity, severity, or landscape patterns. • Vegetation attributes have been moderately altered from their historic ranges. 	Where appropriate, these areas may need moderate levels of restoration treatments, such as fire use and hand or mechanical treatments, to be restored to the historical fire regime.
Condition Class III	<ul style="list-style-type: none"> • Fire regimes have been significantly altered from their historical range. • The risk of losing key ecosystem components is high. • Fire frequencies have departed (either increased or decreased) by multiple return intervals. This change results in dramatic changes to one or more of the following: fire size, frequency, intensity, severity, or landscape patterns. • Vegetation attributes have been significantly altered from their historic ranges. 	Where appropriate, these areas need high levels of restoration treatments, such as hand or mechanical treatments. These treatments may be necessary before fire is used to restore the historical regime.

SOURCE: Hardy et al. 2000 .

Table 3-2. Rare Plant Species Found within the Hellgate Recreation Area

Species	BLM/NWFP Status ¹	Global Ranking ²	Habitat
California maiden-hair <i>Adiantum jordanii</i>	Bureau Tracking/ none	G4G5S2	shaded, steep slopes
Potato bulb Bolander's onion <i>Allium bolanderi</i> var. <i>mirabile</i>	Bureau Tracking/ none	G4T3S3	rocky soils including serpentine
Waldo rockcress <i>Arabis aculeolata</i>	Bureau Tracking/ none	G4S3	rocky serpentine
Rogue Canyon rockcress <i>Arabis modesta</i>	Bureau Assessment/ none	G2QS2	rock outcrops
Koehler's stipitate rockcress <i>Arabis koehleri</i> var. <i>stipitata</i>	Bureau Tracking/ none	G3T3S3	rocky serpentine slopes
Lichen <i>Bryoria tortuosa</i>	none/ Survey and Manage D	none	oaks, pines, chaparral
Moss <i>Buxbaumia viridis</i>	none/ Survey and Manage D	none	large decaying logs
Howell's camas <i>Camassia howellii</i>	Bureau Sensitive/ none	G2S2	rocky serpentine
Santa Barbara sedge <i>Carex barbarae</i>	Bureau Tracking/ none	G4G5S3	seasonally wet areas
Clustered lady's-slipper <i>Cypripedium fasciculatum</i>	Bureau Sensitive/ Survey and Manage C	G3G4S2	moist mixed evergreen forest
Siskiyou fritillary <i>Fritillaria glauca</i>	Bureau Assessment/ none	G4S2	rocky serpentine
Moss <i>Funaria muhlenbergii</i>	Bureau Assessment/ none	G4S1	rock outcrops, cliffs
Howell's lewisia <i>Lewisia cotyledon</i> var. <i>howellii</i>	Bureau Tracking/ none	G4T4S3	rock outcrops
Opposite-leaved lewisia <i>Lewisia oppositifolia</i>	Bureau Tracking/ none	G4S4	rocky serpentine
Stipuled trefoil <i>Lotus stipularis</i>	Bureau Assessment/ none	G5S2	forest, chaparral openings
Howell's microseris <i>Microseris howellii</i>	State Threatened/ none	G3S3	serpentine savannah
Douglas' monkeyflower <i>Mimulus douglasii</i>	Bureau Tracking/ none	G4G5S2	rocky serpentine
Moss <i>Pseudoleskeella serpentinense</i>	Bureau Sensitive/ none	G2S2	serpentine outcrops
Rogue River stonecrop <i>Sedum moranii</i>	Bureau Sensitive/ none	G1S1	serpentine outcrops

Table 3-2. Rare Plant Species Found within the Hellgate Recreation Area

Species	BLM/NWFP Status ¹	Global Ranking ²	Habitat
California smilax <i>Smilax californica</i>	Bureau Tracking/ none	G4S3	riparian forest
Western sophora <i>Sophora leacheana</i>	Bureau Sensitive/ none	G2S2	openings in forests with serpentine influence
Lichen <i>Sulcaria badia</i>	Bureau Sensitive/ none	G2S2	oaks, pines, chaparral

¹Survey and Manage C and D – Uncommon, Manage High Priority Sites.

²G1–Critically imperiled throughout its range, G2–Imperiled throughout its range, G3–rare, threatened, or uncommon throughout its range, G4–Not rare, apparently secure throughout its range, G5–Widespread, abundant, and secure throughout its range, T–Rank for a subspecies, variety, or race, Q–Taxonomic questions.

S1–Critically imperiled in Oregon, S2–Imperiled in Oregon, S3–Rare, threatened, or uncommon in Oregon, S4–Not rare, apparently secure in Oregon.

Table 3-3. Fish Species Located in the Hellgate Recreation Area

Game Fish		Nongame Fish
Cold Water	Warm Water	
Anadromous	Nonnative	Native
Fall chinook salmon	Smallmouth bass	Klamath smallscale sucker
Spring chinook salmon	Bluegill sunfish	Pacific lamprey
Coho salmon	Pumpkinseed sun fish	Threespine stickleback
Winter steelhead	Brown bullhead catfish	Riffle sculpin
Summer steelhead	Yellow perch	Prickly sculpin
Resident		Nonnative
Cutthroat trout		Redside shiner
Rainbow trout		Golden shiner
		Carp
		Goldfish
		Northern squaw fish
		Mosquitofish

Table 3-4. Special Status Species in the Hellgate Recreation Area (Vertebrates)

Species (Common Name)	Status ¹	Presence	Survey Level ²	Habitat Condition	Monitor	Future Surveys
Gray wolf	FE, SE	Absent	N	Historic	No	No
White-footed vole	BT, XC, SU	Suspected	N	Unknown	No	No
Fisher	BS, XC, SC	Documented	1	Suspect negative impacts	No	No
Wolverine	BS, XC, ST	Absent	N	None	No	No
American marten	BT, SU	Suspected	0	Suspect negative impacts	No	No
Ringtail	BT, SU	Documented	1	Suitable	No	No
Red tree vole	BS	Documented	3	Suitable	No	No
Peregrine falcon	BS, SE	Documented	3	Suitable	Yes	Yes
Bald eagle	FT, ST	Documented	3	Suitable	Yes	Yes
Northern spotted owl	FT, ST	Documented	3	Suitable	Yes	Yes
Marbled murrelet	FT, ST	Suspected	3	Suitable	Yes	Yes
Northern goshawk	BS, SC	Suspected	3	Suitable	Yes	Yes
Mountain quail	BT, SU	Documented	4	Suitable	No	No
Pileated woodpecker	BT, SV	Documented	4	Suitable	No	No
Lewis' woodpecker	BS, SC	Documented	4	Suitable	No	No
White-headed woodpecker	BS, SC	Absent	N	None	No	No
Flammulated owl	BS, SC	Suspected	0	Suitable	No	Yes
Purple martin	BS, SC	Suspected	0	Historic	No	No
Tri-colored blackbird	BA, XC, SP	Suspected	0	Suitable	No	No
Great gray owl	BT, SV	Documented	4	Unknown	No	No
Western bluebird	BT, SV	Documented	3	Suitable	No	No
Acorn woodpecker	BT	Documented	4	Suitable	No	No
Pygmy owl	BS, SC	Documented	3	Suitable	No	No
Bank swallow	BT, SU	Documented	4	Unknown	No	No
Townsend's big-eared bat	BS, XC, SC	Documented	3	Suitable	Yes	Yes
Yuma myotis	BT, XC	Documented	3	Suitable	Yes	Yes
Long-eared myotis	BT, XC, SU	Suspected	3	Suitable	Yes	Yes
Long-legged myotis	BT, XC, SU	Suspected	3	Suitable	Yes	Yes
Silver-haired bat	BY, SU	Suspected	3	Suitable	Yes	Yes
Fringed myotis	BT, XC, SV	Documented	3	Suitable	Yes	Yes
Pallid bat	BT, SV	Documented	3	Historic	Yes	Yes
Western pond turtle	BS, XC, SC	Documented	3	Suspect negative impacts	Yes	Yes
Del Norte salamander	BS, XC, SV	Documented	3	Suitable	No	Yes
Foothills yellow-legged frog	BT, XC, SV	Documented	3	Suitable	No	No
Red-legged frog	BT, XC, SV	Suspected	0	Historic	No	No
Tailed frog	BT, XC, SV	Suspected	0	Unknown	No	No
Southern torrent salamander	BT, XC, SV	Suspected	2	Suspect negative impacts	No	Yes
Black salamander	BA, SP	Documented	2	Unknown	No	No
Clouded salamander	BT, SU	Suspected	0	Suspect negative impacts	No	No
Northern sagebrush lizard	BT, XC	Suspected	0	Suitable	No	No
Common kingsnake	BT, SV	Documented	1	Suitable	No	No
Sharptail snake	BT, SV	Suspected	0	Suitable	No	No
California mountain kingsnake	BT, SV	Documented	1	Suitable	No	No

¹STATUS:

FE—Federal Endangered
 FT—Federal Threatened
 XC—Former Federal Candidate
 BS—Bureau Sensitive
 BT—Bureau Tracking
 BA—Bureau Assessment

SE—State Endangered
 ST—State Threatened
 SC—ODFW Critical
 SV—ODFW Vulnerable
 SP—ODFW Peripheral or Naturally Rare
 SU—ODFW Undetermined

²SURVEY LEVEL:

N—No surveys needed
 0—No surveys done
 1—Literature search only
 2—One filed search
 3—Some surveys completed
 4—Opportunistic sightings

Table 3-5. Special Status Species in the Hellgate Recreation Area (Invertebrates)

Species (Common Name)	Status ¹	Presence	Survey Level	Habitat	Monitor
Burnells' false water penny beetle	BT, XC	Uncertain	No surveys done	Unknown	No
Denning's Agapetus caddisfly	BT, XC	Uncertain	No surveys done	Unknown	No
Green Springs Mtn. Farulan caddisfly	BT, XC	Absent	No surveys needed	None	No
Schuh's Homoplectran caddisfly	BT, XC	Uncertain	No surveys done	Unknown	No
Obrien Rhyacophilan caddisfly	BS, XC	Absent	No surveys done	Unknown	No
Siskiyou caddisfly	BT, XC	Suspected	No surveys done	Unknown	No
Alsea Ochrotichian Micro caddisfly	BT	Suspected	No surveys done	Unknown	No
Franklin's bumblebee	BS, XC	Uncertain	No surveys done	Unknown	No

'STATUS:

XC-Former Federal Candidate

BS-Bureau Sensitive

BT-Bureau Tracking

Table 3-6. Great Blue Heron Monitoring from Grants Pass to Grave Creek on the Rogue

Site	Location	Year	Number of Nests	Number of Adults	Number of Juveniles	Comments
Brushy Chutes	35S-07W-36 SW/NW	1971	5-10	Not recorded	Not recorded	Site appeared to be active.
Brushy Chutes	35S-07W-36 SW/NW	1972	32	Not recorded	Not recorded	
Brushy Chutes	35S-07W-36 SW/NW	1982	8	Not recorded	Not recorded	
Brushy Chutes	35S-07W-36 SW/NW	1994	11	8	Unknown	Only one site visit made in March.
Carpenters Island	35S-08W-01 SW/NE	1972	>15	Not recorded	Not recorded	Number of nests estimated.
Carpenters Island	35S-08W-01 SW/NE	1990	Not recorded	0	0	Old nests in bad repair; no sign of birds.
Hale	36S-07W-13 SE/NW	1994	2	2	1	New; discovered this year.
Hog Creek	36S-07W-13 SE/NW	1971	7	Not recorded	Not recorded	Rookery discovered this year.
Hog Creek	36S-07W-13 SE/NW	1972	10	Not recorded	Not recorded	
Hog Creek	35S-07W-11 SW	1990	0	0	0	No nests or birds found.
Robertson Bridge	35S-07W-22	1990	Not recorded	16	10	
Rocky Riffle	34S-08W-36 SE/NW	1982	6	Not recorded	Not recorded	
Rocky Riffle	34S-08W-36 SE/NW	1990	5	3	8	
Rocky Riffle	34S-08W-36 SE/NW	1994	6	4	0	Last visit 4/30/94.
Taylor Creek	35S-07W-5&6	1990	5	5	2	
Twin Peak Riffle	34S-08W-25 SW/NE	1990	0	0	0	No nests or birds found.
Two Bit Riffle	35S-07W-14 SE	1982	12	Not recorded	Not recorded	
Two Bit Riffle	35S-07W-14 SE	1990	11	7	15	

Table 3-6. Great Blue Heron Monitoring from Grants Pass to Grave Creek on the Rogue

Site	Location	Year	Number of Nests	Number of Adults	Number of Juveniles	Comments
White Horse Park Riffle	36S-06W-19 NW/NW	1996	15	10	16	
White Horse Park Riffle	36S-06W-19 NW/NW	1997	16	30	23	
White Horse Park Riffle	36S-06W-19 NW/NW	1999	20	15	0	Too early for juveniles.
White Horse Park Riffle	36S-06W-19 NW/NW	2000	15	46	23	
Brushy Chutes	35S-07W-36 NW/NW	2001	11	Not recorded.	Not recorded.	Newly discovered rookery.

SOURCE: ODFW.

Table 3-7. Fall Neotropical Migratory Bird Species List for the Hellgate Recreation Area

Western/Pacific slope flycatcher	Common yellowthroat
Willow flycatcher	Black-headed grosbeak
Dusky flycatcher	Spotted towhee
Western wood peewee	Savannah sparrow
Scrub jay	Fox sparrow
Black-capped chickadee	Song sparrow
Common bushtit	Lincoln's sparrow
Brown creeper	White-throated sparrow
Bewick's wren	Golden-crowned sparrow
Winter wren	White-crowned sparrow (Puget Sound/Gambel's)
Marsh wren	Dark-eyed junco (OR)
Ruby-crowned kinglet	Northern oriole (Bullock's)
Swainson's thrush	Western tanager
Varied thrush	Lesser goldfinch
American robin	American goldfinch
Wrentit	Purple finch
Cedar waxwing	Northern flicker
Huttons vireo	Hairy woodpecker
Warbling vireo	Downy woodpecker
Yellow warbler	Red-breasted sapsucker
Black-throated Gray warbler	Red-shafted flicker
Yellow-rumped warbler (Myrtle/Audubon)	Nashville warbler
MacGillivray's warbler	Orange-crowned warbler
Pygmy owl	Common yellowthroat

SOURCE: Data taken at Wildlife Images Site.

Table 3-8. Total Water-Based Visitor Use in the Hellgate Recreation Area (1991)

Month	Bank Angler	Boat Angler	Float	Jet Boat	Motorized Tour Boats	Total
January	440	178	15	5	0	638
February	460	938	25	14	0	1,437
March	666	1,090	53	10	0	1,819
April	96	87	154	15	0	352
May	454	96	1,349	343	3,437	5,679
June	205	84	3,116	115	11,395	14,915
July	89	43	9,801	22	21,222	31,177
August	354	233	10,651	97	23,661	34,996
September	676	956	3,191	122	13,141	18,086
October	385	585	12	15	0	997
November	272	171	7	10	0	460
December	112	40	5	5	0	162
Total	4,209	4,501	28,379	773	72,856	110,718
Percent of Use	4%	4%	26%	1%	65%	100%

SOURCE: USDI, BLM, MDO 1995.

Table 3-9. Visitor Use Conflicts in the Hellgate Recreation Area

Concern	Total	Motorized Tour Boat Passengers	Floaters	Anglers
Is rude behavior a problem on the river?	(%)	(%)	(%)	(%)
No	38	51	38	30
Minor problem	39	33	43	40
Problem or major problem	23	16	19	30
Are conflicts among users a problem?				
No	30	40	28	26
Minor problem	40	42	44	36
Problem or major problem	30	18	28	38
Did others interfere with your trip (% yes)	43	21	38	60
If yes, in what ways?				
Jet boat activity (Speed, noise, and wake)	51	16	55	57
Crowded conditions (Too many people, boats, or large groups)	23	51	29	14
Behavior (Rude behavior, noise, misuse of alcohol, poor river etiquette)	19	29	11	20
Safety (Unsafe boating and boat anchoring)	6	4	3	8
Ecological impacts (user impacts, such as erosion, vegetation, fire rings, and litter)	1	0	1	1
If yes, what group(s) were responsible? (Respondents could name more than one group.)				
Jet boaters	72	32	68	83
Floaters	32	55	43	23
Anglers	17	26	14	16

SOURCE: Shindler and Shelby 1993, page 50.

Table 3-10. Problem Identification for the Hellgate Recreation Area¹

Condition	Total	Motorized Tour Boats	Floaters	Anglers
	(%)	(%)	(%)	(%)
Environmental Conditions				
Amount of litter	41	19	48	49
Not enough toilets	37	24	41	40
Condition of toilets	26	–	25	26
Presence of human waste	24	–	26	22
Capacity Problems				
Too many excursion jet boats	52	15	53	73
Congestion at put-in/take-out	29	–	37	23
Too many rafter/kayakers	18	15	17	20
Too many anglers	8	5	2	13
Social Conditions				
Safety concerns about motorized boats	44	18	47	57
Use of alcohol on river	34	31	37	33
Conflicts between users	30	18	28	38
Better handicapped access	29	25	28	30
Noise levels (motors, stereos)	26	15	32	29
Rude behavior by others	23	16	19	30
Angling Conditions				
Lack of fish	–	–	–	78
Presence of squaw fish	–	–	–	53
Competition for fishing holes	–	–	–	34

¹Percentage of users who feel conditions are a problem or major problem.

SOURCE: Shindler and Shelby 1993.

Table 3-11. Boating Safety Issues in the Hellgate Recreation Area¹

Issues	Total	Motorized Tour Boats	Floaters	Anglers
	% Agree	% Agree	% Agree	% Agree
High speed of motorized boats	48	13	43	73
Boat wakes are too big	45	11	37	72
Too little space to maneuver excursion jet boats in some locations	45	15	49	61
Operation of excursion jet boats	41	8	38	63
Operation of other motor boats	34	14	34	46
Boats pass too close to rafters and other boats	32	8	39	41
Use of alcohol on river	30	21	35	31
Too much floating traffic	17	13	18	19
There are no boating safety problems I'm aware of	24	48	18	13
Do you wear a life vest on the river?	80	70	95	68

¹Percentage of users who feel conditions are a problem or major problem.

SOURCE: Shindler and Shelby 1993.

Table 3-12. Existing Trails

Trail Name	Length	Use	Access
Informal Trails – not regularly maintained			
East Cliffs Trail	1.5 miles	Multiple use. Day use only.	Destination trail with high scenic vistas on the right bank of the river. Access from Robertson Bridge to an area across from Little Pickett Creek.
Matson to Ferry Trail	.75 miles	Multiple use. Day use only.	Ridge top trail located on the right bank of the river from Matson Park downstream to private property. Old road was cleared by Boy Scouts and leads to a Boy Scout camp.
Hellgate Trail	0.5 miles	Hiking. Day use and overnight.	An existing trail along the left bank used by anglers from Hellgate Bridge upstream to Hellgate Canyon. Access is from Merlin-Galice Road at Hellgate Bridge.
Stratton Creek Trail	1.0 miles	Hiking. Day use and overnight.	An existing trail used by anglers from Hellgate Recreation Site downstream to Taylor Creek Gorge. Access from Hellgate Recreation Site.
Buckhorn Mountain Trail	2.5 miles	Multiple use. Day use and overnight.	Trail on existing road leading to an historic mining area above the river on the left bank. Access is from Merlin-Galice Road near Hellgate Bridge.
Robert Dean Placer Mine Trail	8.0 miles	Multiple use. Day use and overnight.	Trail is along existing trails, roads, and mining ditches. Trail is on the right bank from near Hellgate Recreation Site to Robert Dean Placer Mine.
Designated, regularly maintained trails			
Whitehorse Nature Trail	1.5 miles	Hiking. Day use only.	Existing trail begins in the day use area in Whitehorse Park near the picnic shelter and loops through both BLM and Josephine County Parks land.
Umpqua Joe Trail	5.0 miles	Hiking. Day use only.	This trail exists on Josephine County Parks land within the river corridor. Access is from Merlin-Galice Road across from Indian Mary Park.

Table 3-13. MTB Business, Visitor Use, Boat Runs, and Boat Trips (1973-2001)

Year	Visitor Use		Boat Runs		Boat Trips		Use: Trip Ratio
	Numbers	% Change	Numbers	% Change	Numbers	% Change	
1973	8,000		—	—	—	—	—
1974	5,000	-37	—	—	—	—	—
1975	6,000	+20	—	—	—	—	—
1976	6,000	0	—	—	—	—	—
1977	12,000	+100	—	—	—	—	—
1978	15,900	+33	—	—	—	—	—
1979	18,800	+18	—	—	—	—	—
1980	18,700	-1	—	—	—	—	—
1981	19,200	+3	—	—	—	—	—
1982	20,400	+6	—	—	—	—	—
1983	19,800	-3	—	—	—	—	—
1984	19,200	-3	—	—	—	—	—
1985	23,151	+21	330	—	1,067	—	22:1
1986	32,000	+38	440	+33	*942	-12	34:1
1987	38,500	+20	510	+16	*1,091	+16	35:1
1988	52,000	+35	750	+47	*1,605	+47	32:1
1989	62,185	+20	887	+18	*1,898	+18	33:1
1990	64,084	+3	741	-16	1,518	-20	42:1
1991	72,856	+14	753	+2	1,661	+9	44:1
1992	68,058	-7	704	-6	1,571	-5	43:1
1993	68,135	0	763	+8	1,565	0	44:1
1994	70,356	+3	721	-5	1,604	+3	44:1
1995	70,932	0	777	+8	1,635	+2	43:1
1996	75,250	+6	797	+3	1,604	-2	47:1
1997	74,970	-4	793	0	1,623	+2	46:1
1998	74,690	-4	765	-4	1,577	-3	47:1
1999	69,866	-6	766	0	1,495	-5	47:1
2000	76,467	+9	773	+1	1,589	+6	48:1
2001	60,846	-20	546	-29	1,293	-18	47:1
Average	42,184	+9	695	+5	1,525	+3	40:1

SOURCE: USDI, BLM, MDO, GPRA 1994.

NOTE: Averages are based on the years 1985 through 2001.

*Approximations using a known boat run to boat trip ratio of 1:2.14 for the years 1990-1993.

Table 3-14. Total Watercraft in the Hellgate Recreation Area (1991)

Month	Raft	Inflatable Kayak	Kayak	Drift Boat	Jet Boat	Motorized Tour Boat	Other ¹	Total
January	3	0	0	91	2	0	0	96
February	5	0	0	395	8	0	0	408
March	13	0	2	443	5	0	0	463
April	39	0	0	61	8	0	0	108
May	217	327	24	37	116	96	14	831
June	404	1,129	80	42	42	280	36	2,013
July	1,201	3,685	85	47	60	461	128	5,667
August	1,320	4,013	99	85	34	514	98	6,163
September	414	1,134	34	380	55	310	36	2,363
October	6	0	0	268	8	0	7	289
November	2	0	0	91	5	0	0	98
December	2	0	0	40	2	0	0	44
Total	3,626	10,288	324	1,980	345	1,661	319	18,543
Percent of Use	20%	55%	1.5%	11%	2%	9%	1.5%	100%

SOURCE: Austermuehle 1995.

¹Canoes, inner tubes, durt bags.

Table 3-15. Housing Densities per River Mile in the Hellgate Recreation Area (1970)

Location	River Mile	Left Bank Houses	Right Bank Houses
Grave Creek	65		
	65 - 70	0	0
	70 - 71	1	0
	71 - 72	16	0
Galice	72 - 73	6	0
	73 - 74	1	0
	74 - 75	0	0
	75 - 76	1	0
	76 - 77	0	0
	77 - 78	0	0
	78 - 79	0	0
Jumpoff Joe Creek	79 - 80	4	1
	80 - 81	2	0
	81 - 82	2	0
	82 - 83	11	4
	83 - 84	8	1
Brushy Chutes	84 - 85	6	1
	85 - 86	0	0
	86 - 87	0	1
	87 - 88	8	4
	88 - 89	0	0
	89 - 90	0	0
	90 - 91	0	0
	91 - 92		
Applegate River	92	0	0
Total		66	12
Average		2.87	.52

NOTE: Only houses visible from the river are counted.

Table 3-16. Landowner Attitudes Toward Noise in the Hellgate Recreation Area¹

	No Problem	Minor Problem	Significant Problem	Major Problem
Nonmotorized Floaters and Anglers	56.2	43.8	0.0	0.0
Motorized Tour Boats (jet boats)	6.2	25.0	14.1	54.7
Private Motorized Boats	7.8	51.6	31.2	9.4
Hikers	66.1	33.9	0.0	0.0
Campers	53.2	32.3	12.9	1.6
Anglers	62.5	35.9	1.6	0.0

¹Percentage of landowners indicating noise is a problem.

SOURCE: York, Rowland and Salley 1994, pg. 13.

Table 3-17. Existing Main Access Roads and Bridges

Road Name	Length (miles)	Surface Type ¹	Road Standard	Maintenance
Applegate Reach				
Upper River Road	4.6	Asphalt	2 lane	County
Lower River Road	11.5	Asphalt	2 lane	County
Riverbanks Road	9.2	Asphalt	2 lane	
Robertson Bridge	N/A	Asphalt	2 lane	County
Robertson Bridge Road	2.25	Asphalt	2 lane	County
Azalea Drive	0.90	Asphalt	2 lane	County
Merlin-Galice Road (to Hog Creek)	8.1	Asphalt	2 lane	County
Dunn Reach				
Merlin-Galice Road (Hog Cr. to Almeda Park)	10.40	Asphalt	2 lane	County
Hellgate Bridge	N/A	Asphalt	2 lane	BLM
Almeda Road (34S-8W-13)	3.50	BST	1 lane	BLM
Grave Creek Bridge	N/A	Asphalt	1 lane	BLM
Mt. Reuben Road (34S-8W-01)	0.03	BST	1 lane	BLM

¹Bituminous Surface Treatment (BST).

Table 3-18. Existing Recreation Sites Access Roads in the Hellgate Recreation Area

Recreation Site Name	Access Road Length (Miles)	Surface Type ¹	Maintenance
Applegate Reach			
Whitehorse Park	0.57	BST, ASC, NAT	County
Griffin Park (Griffin Road)	0.58	BST	County
Matson Park	1.90	BST	County
Upper Ferry Park (Ferry Road)	1.52	BST	County
Robertson Bridge Boat Landing	0.03	BST	County, BLM
Dunn Reach			
Jumpoff Joe Fishing Access	0.37	NAT	County
Hog Creek Boat Landing	0.27	BST	County
Hellgate Canyon Viewpoint		BST	BLM
Hellgate Bridge Viewpoint		ASC	BLM
Hellgate Recreation Site			BLM
Indian Mary Park	0.25	BST	County
Rainbow Recreation Site	0.06	ASC	BLM
Ennis Riffle	0.06	BST	County
Carpenter's Island Recreation Site	0.04	ASC	BLM
Galice Boat Landing	0.07	BST	Private, County
Rocky Bar Recreation Site	0.50	ASC, NAT	BLM
Chair Riffle Recreation Site	0.17	NAT	BLM
Rand Complex	0.34	BST	BLM
Almeda Park	0.10	BST	County
Argo Recreation Site	0.25	ASC, NAT	BLM
Grave Creek Boat Landing	0.12	BST	BLM

¹Bituminous Surface Treatment (BST); Aggregate Surface Coarse (ASC); Natural Surface (NAT).

Table 3-19. Employment

	Jackson County			Josephine County		
	1990	1994	1999	1990	1994	1999
Employment by Place of Work						
Total Full Time and Part Time Employment	75,337	85,059	101,323	26,603	28,591	33,712
By Type						
Wage and Salary Employment	58,846	66,319	76,535	19,604	20,894	23,300
Proprietor's Employment	16,491	18,740	24,788	6,999	7,697	10,412
Farm Proprietor's Employment	1,834	1,869	1,781	680	692	705
Nonfarm Proprietor's Employment	14,657	16,871	23,007	6,319	7,005	9,707
By Industry						
Farm Employment	3,052	3,026	2,667	1,047	1,041	983
Nonfarm Employment	72,285	82,033	98,656	25,556	27,550	32,729
Ag. Serv., Forestry, Fishing, and Other	994	1,360	2,007	493	649	832
Mining	174	155	241	117	109	140
Construction	4,034	4,975	6,205	1,334	1,846	2,237
Manufacturing	9,933	10,460	10,126	4,540	3,758	4,015
Transportation and Public Utilities	3,683	3,569	4,464	894	971	1,198
Wholesale Trade	2,847	3,057	3,286	649	756	1,035
Retail Trade	16,259	19,187	22,298	5,633	6,173	6,736
Finance, Insurance, and Real Estate	4,429	4,946	7,141	1,648	1,905	2,529
Services	19,758	23,867	31,589	6,651	7,711	9,853
Government and Government Enterprises	10,174	10,457	11,299	3,597	3,672	4,154
SOURCE: U.S. Department of Commerce.						

Table 3-20. Income (thousands of dollars)

	Jackson County			Josephine County		
	1990	1994	1999	1990	1994	1999
Earnings by Place of Work						
Total Earnings by Place of Work	1,481,039	1,964,864	2,534,137	465,246	571,651	749,361
By Type						
Wages and Salaries	1,085,100	1,400,015	1,927,010	329,621	390,654	532,691
Other Labor Income	111,861	155,939	218,927	35,309	44,325	62,964
Proprietor's Income	284,078	408,910	388,200	100,316	136,672	153,706
Farm Proprietor's Income	3,535	-1,017	-15,975	680	1,284	-4,844
Nonfarm Proprietor's Income	280,543	409,927	404,175	99,636	135,388	158,550
By Industry						
Farm Earnings	14,797	11,241	4,038	2,831	3,634	-983
Nonfarm Earnings	1,466,242	1,953,623	2,530,099	462,415	568,017	750,344
Ag. Serv., Forestry, Fishing, and Other	11,866	16,696	31,344	6,359	9,001	17,466
Mining	2,827	3,579	5,010	2,324	2,365	3,291
Construction	100,614	147,680	201,159	31,274	47,368	64,046
Manufacturing	309,637	395,549	363,656	103,901	96,393	109,609
Transportation and Public Utilities	108,249	117,609	170,130	24,257	28,290	36,671
Wholesale Trade	77,319	93,489	108,368	12,195	15,280	25,112
Retail Trade	230,825	311,445	418,856	87,394	105,988	119,481
Finance, Insurance, and Real Estate	49,237	87,375	150,727	13,537	23,634	38,794
Services	352,200	495,564	667,407	109,586	140,285	194,202
Government and Government Enterprises	233,409	294,077	413,442	75,831	94,245	141,672

SOURCE: U.S. Department of Commerce.

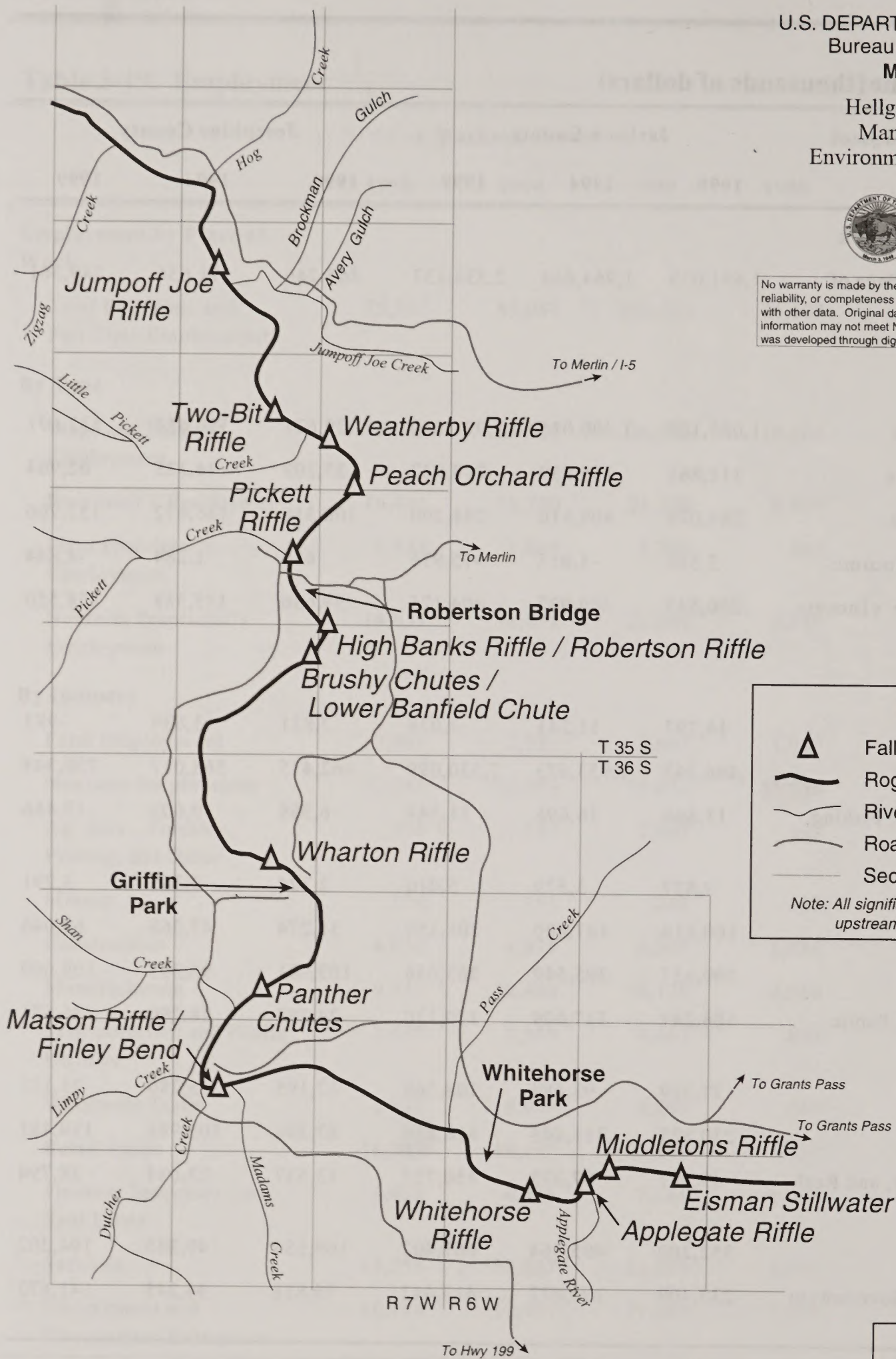
U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Medford District

Hellgate Recreation Area
Management Plan and
Environmental Impact Statement
2003



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

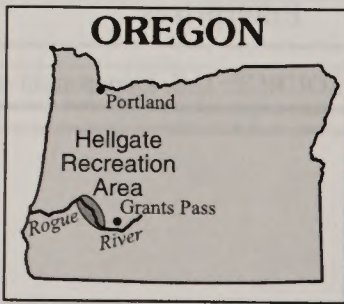
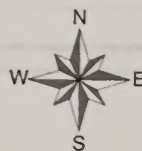
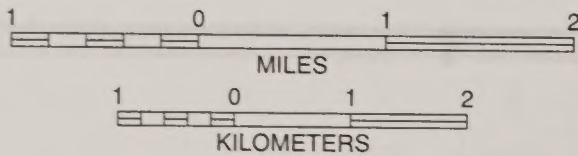
D10-02-02 : JR



Legend

- Fall Chinook Spawning Area
- Rogue River
- River or Creek
- Road
- Section Line

Note: All significant spawning areas occur upstream of Hog Creek



Map 3-1: Fall Chinook Spawning Areas
Rogue River: Applegate River to Grave Creek

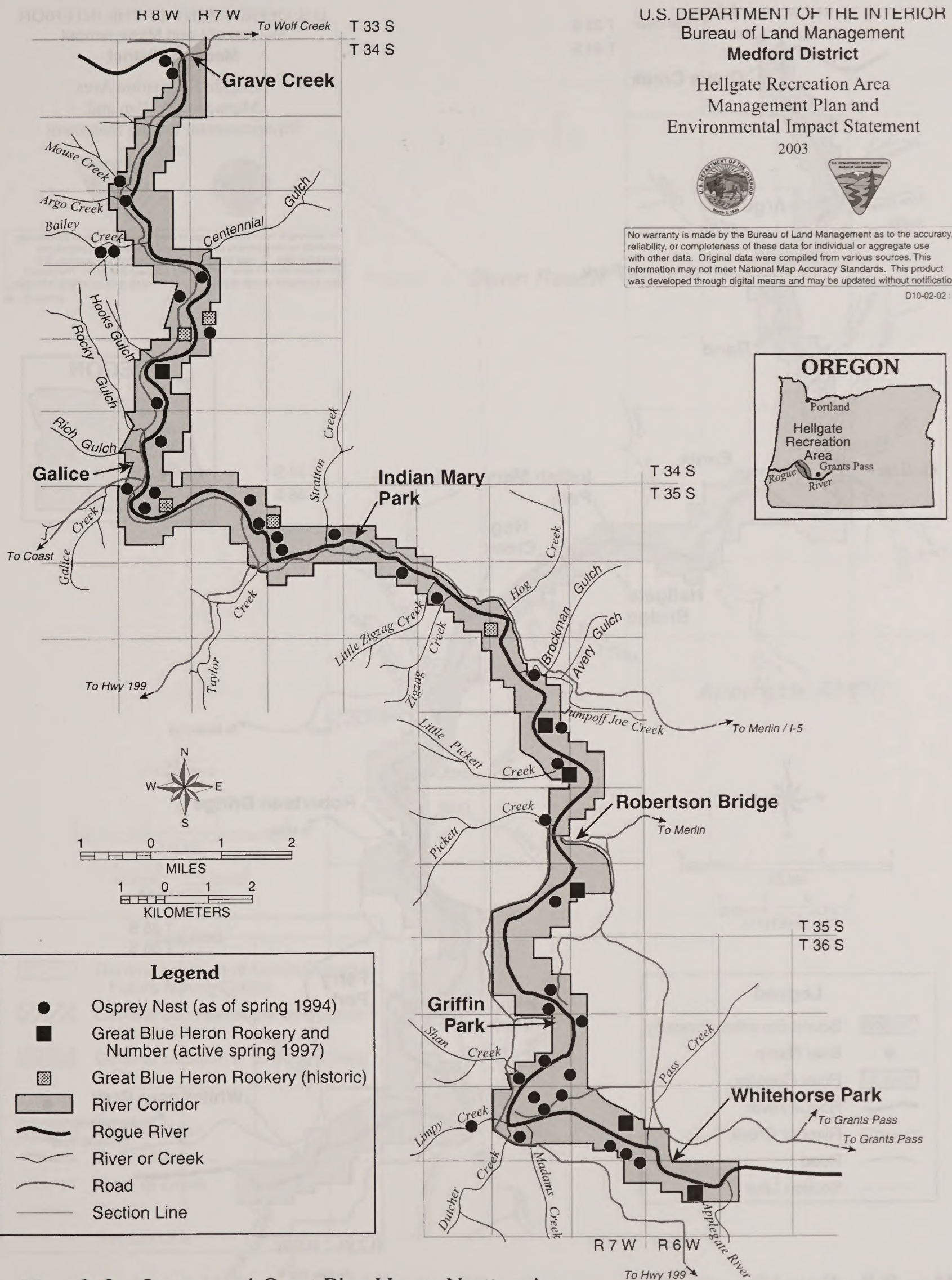
U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Medford District

Hellgate Recreation Area
Management Plan and
Environmental Impact Statement
2003

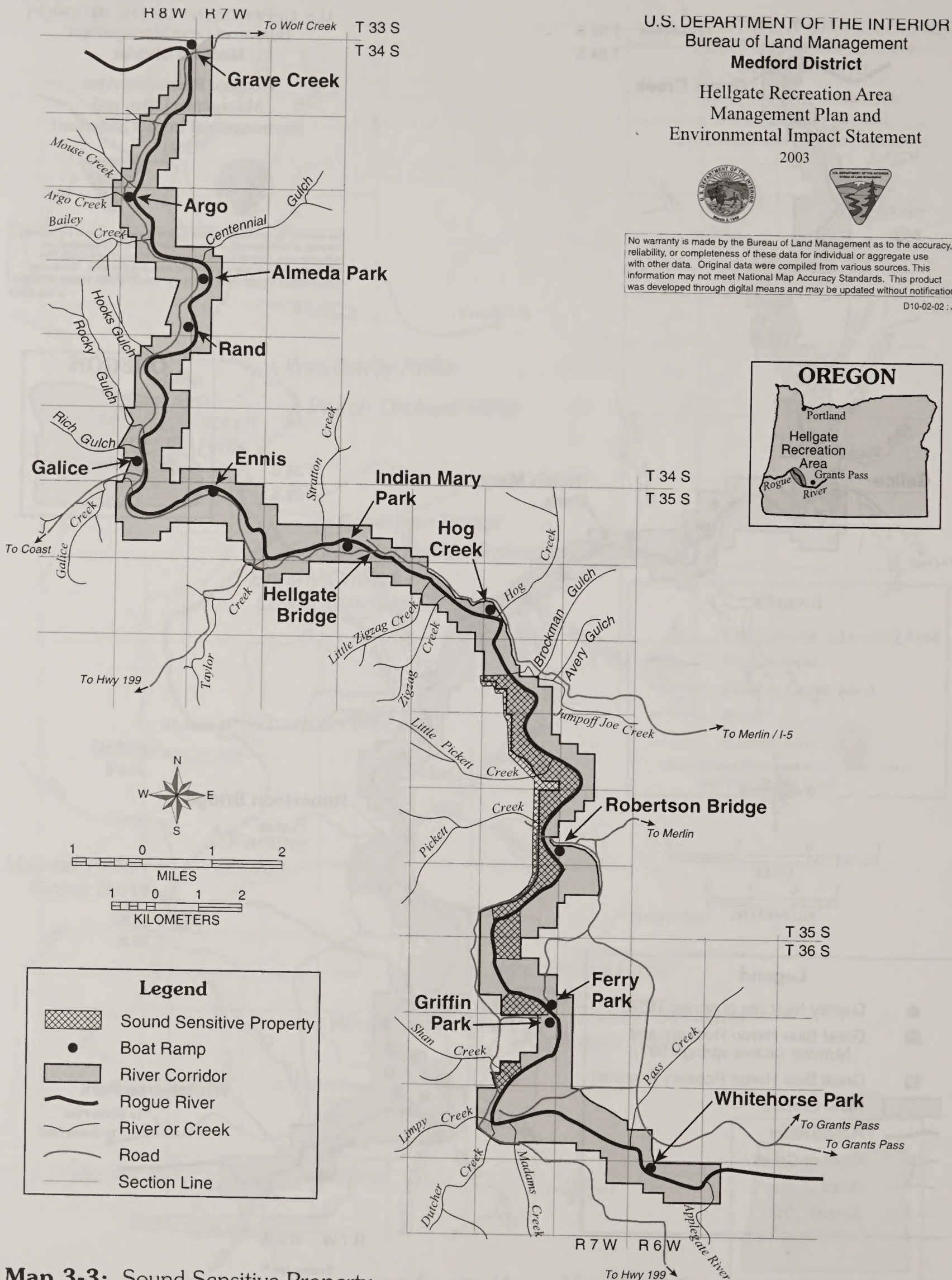


No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

D10-02-02 : JR



Map 3-2: Osprey and Great Blue Heron Nesting Areas
Rogue River: Applegate River to Grave Creek



Map 3-3: Sound Sensitive Property
Rogue River: Applegate River to Grave Creek

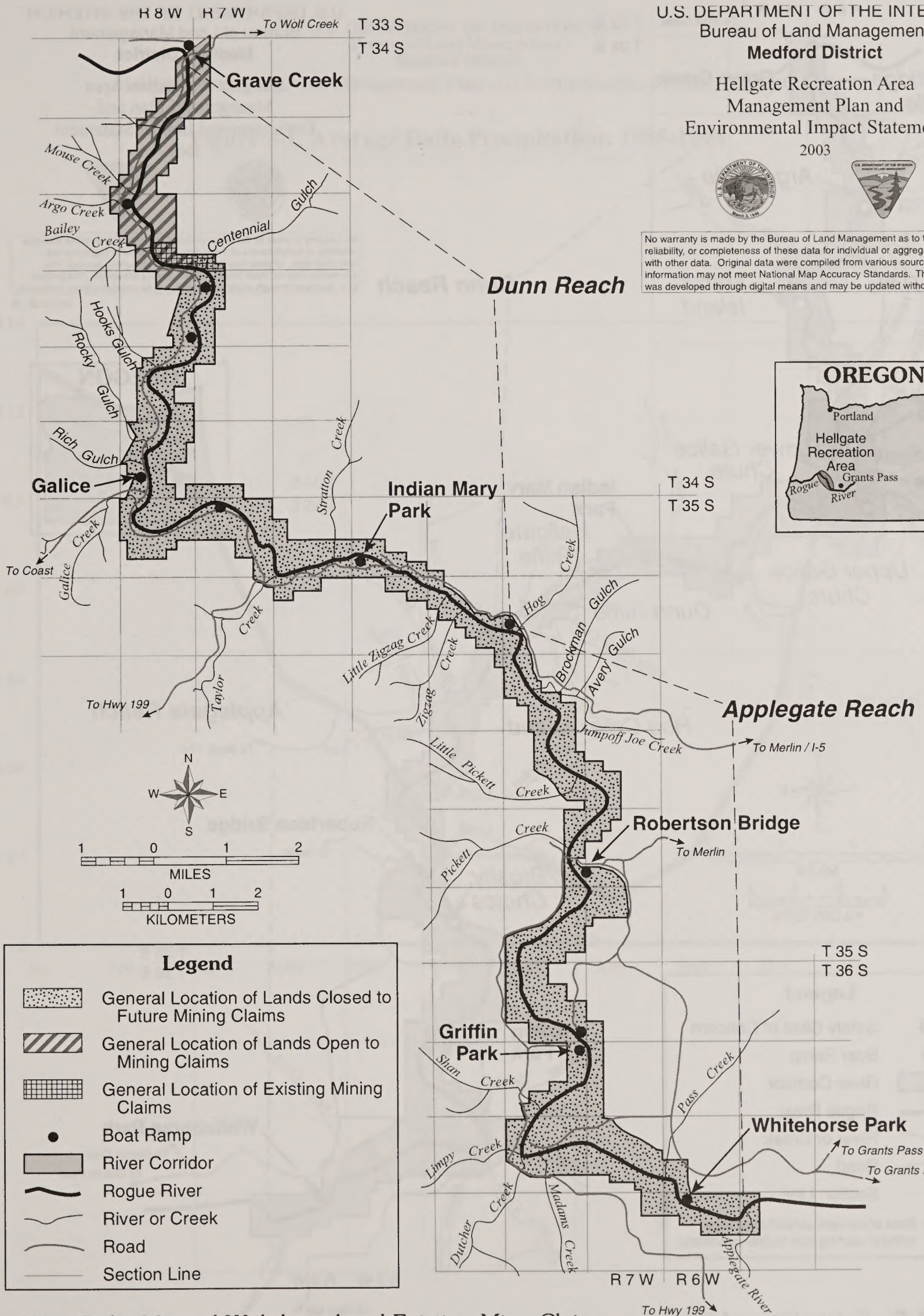
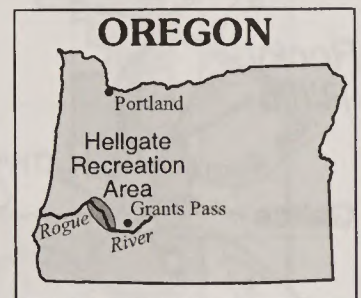
U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Medford District

Hellgate Recreation Area
Management Plan and
Environmental Impact Statement
2003

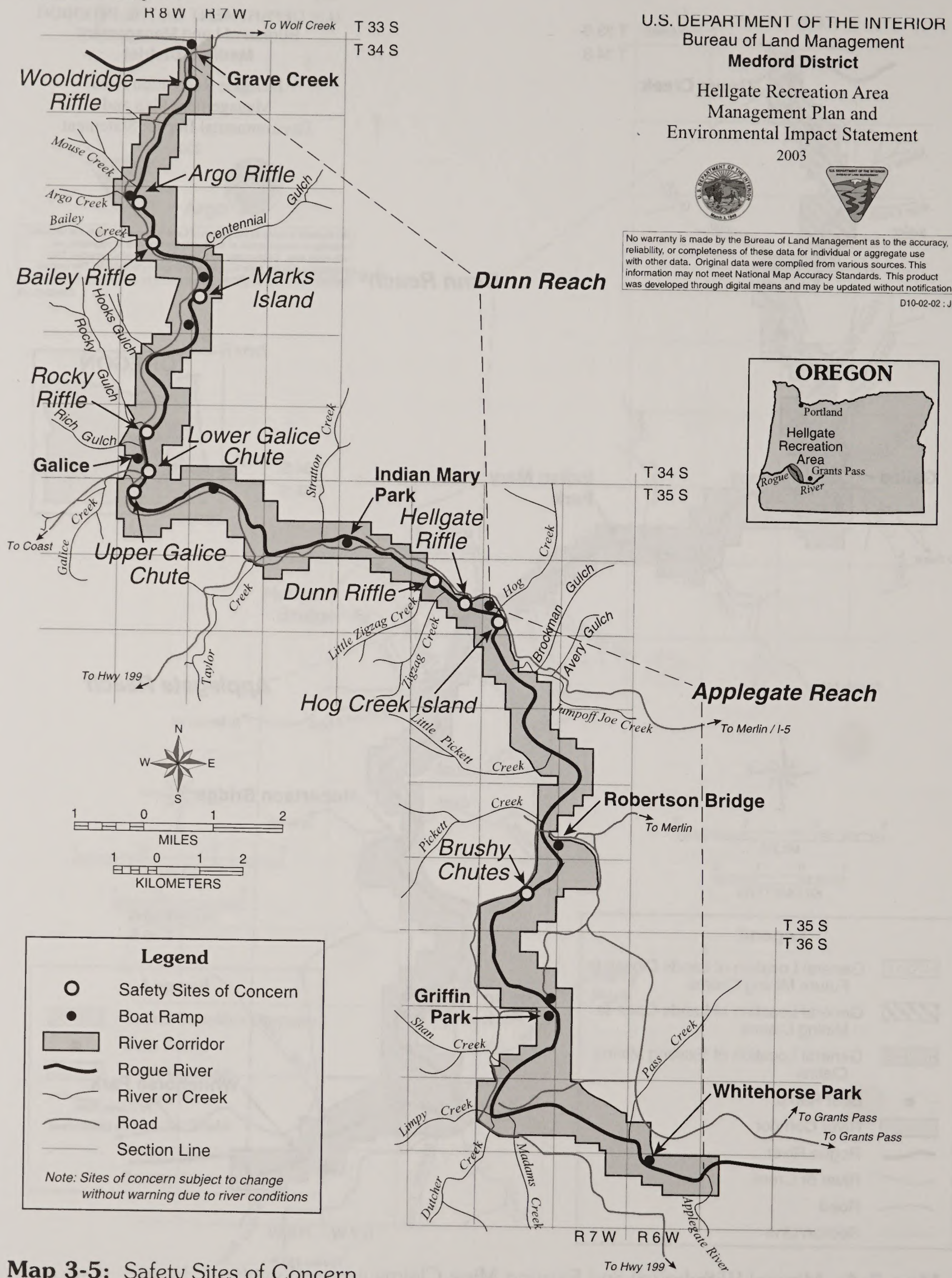


No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

D10-02-02 : JR

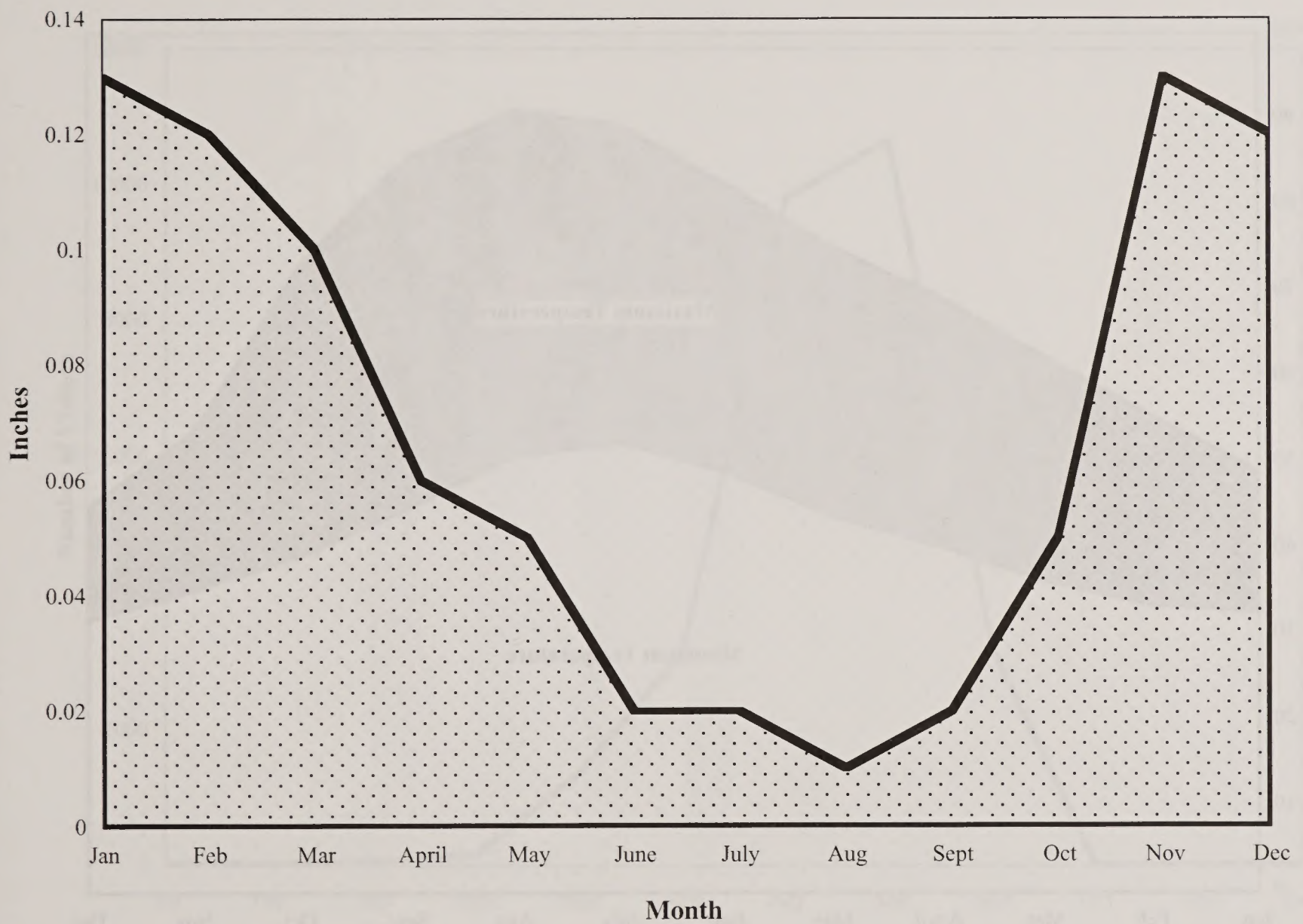


Map 3-4: Mineral Withdrawal and Existing Mine Claims
Rogue River: Applegate River to Grave Creek



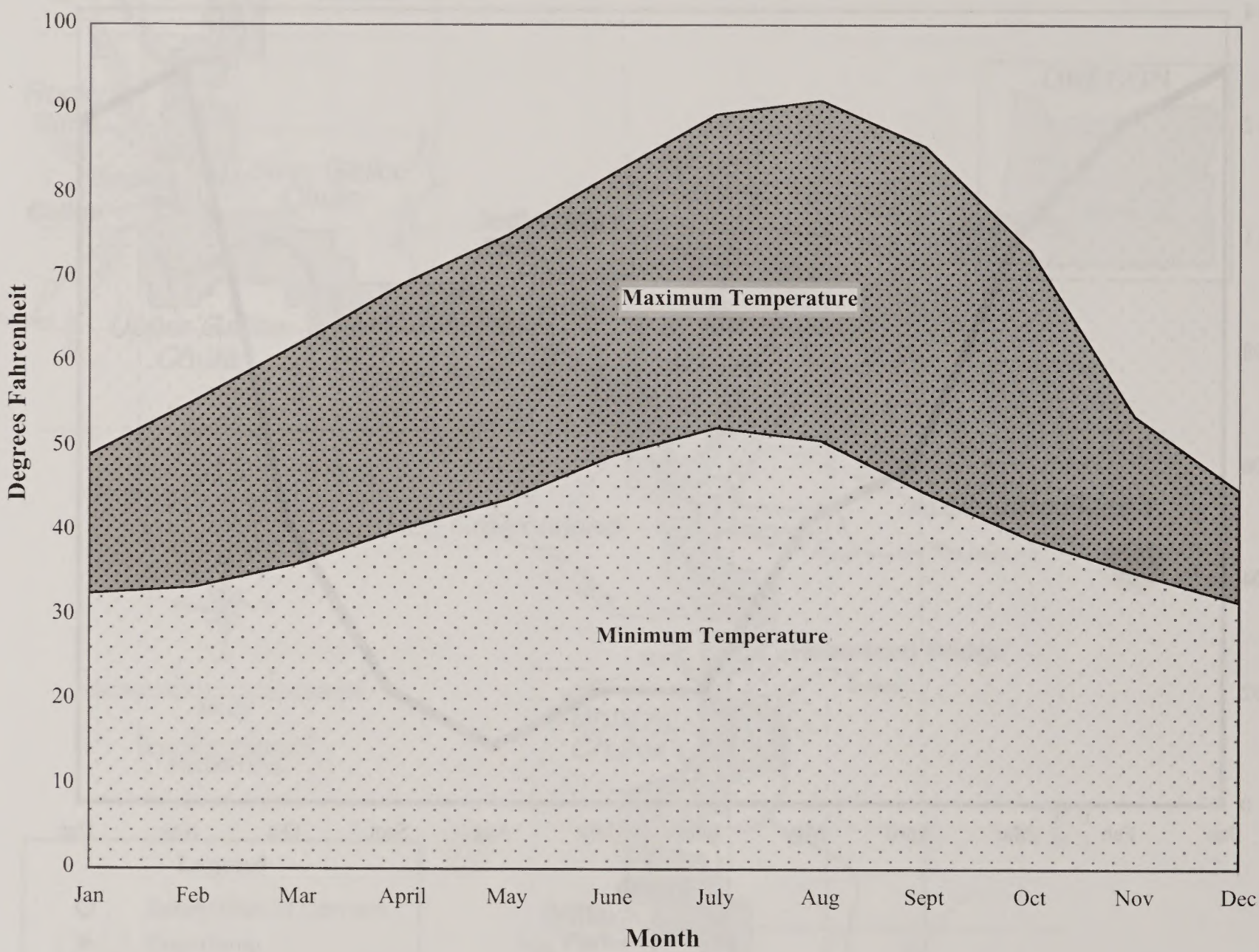
U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Medford District
Hellgate Recreation Area Management Plan and Environmental Impact Statement

Figure 3-1. Average Daily Precipitation: 1985-1994



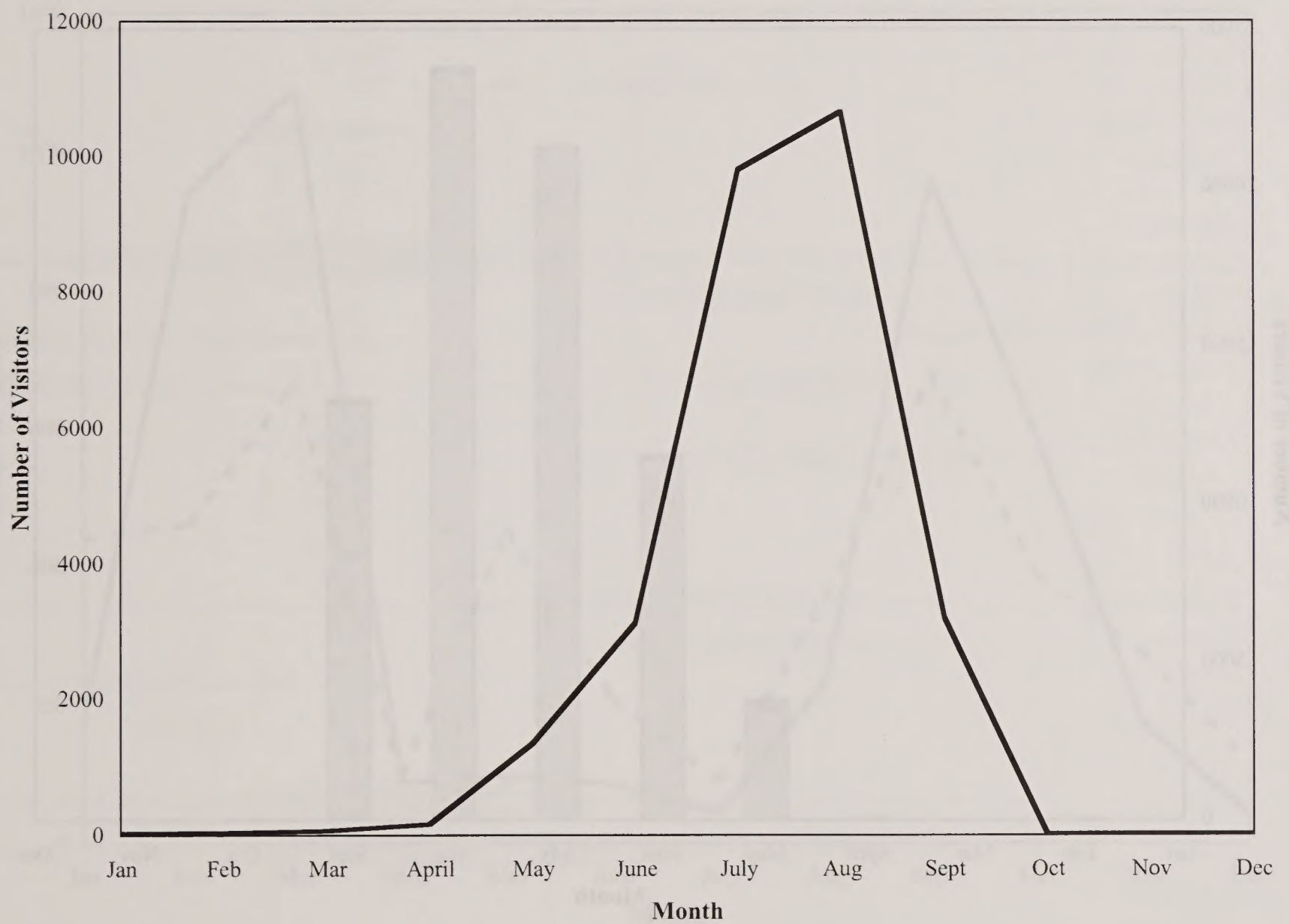
U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Medford District
Hellgate Recreation Area Management Plan and Environmental Impact Statement

Figure 3-2. Average Monthly Temperatures: 1985-1994



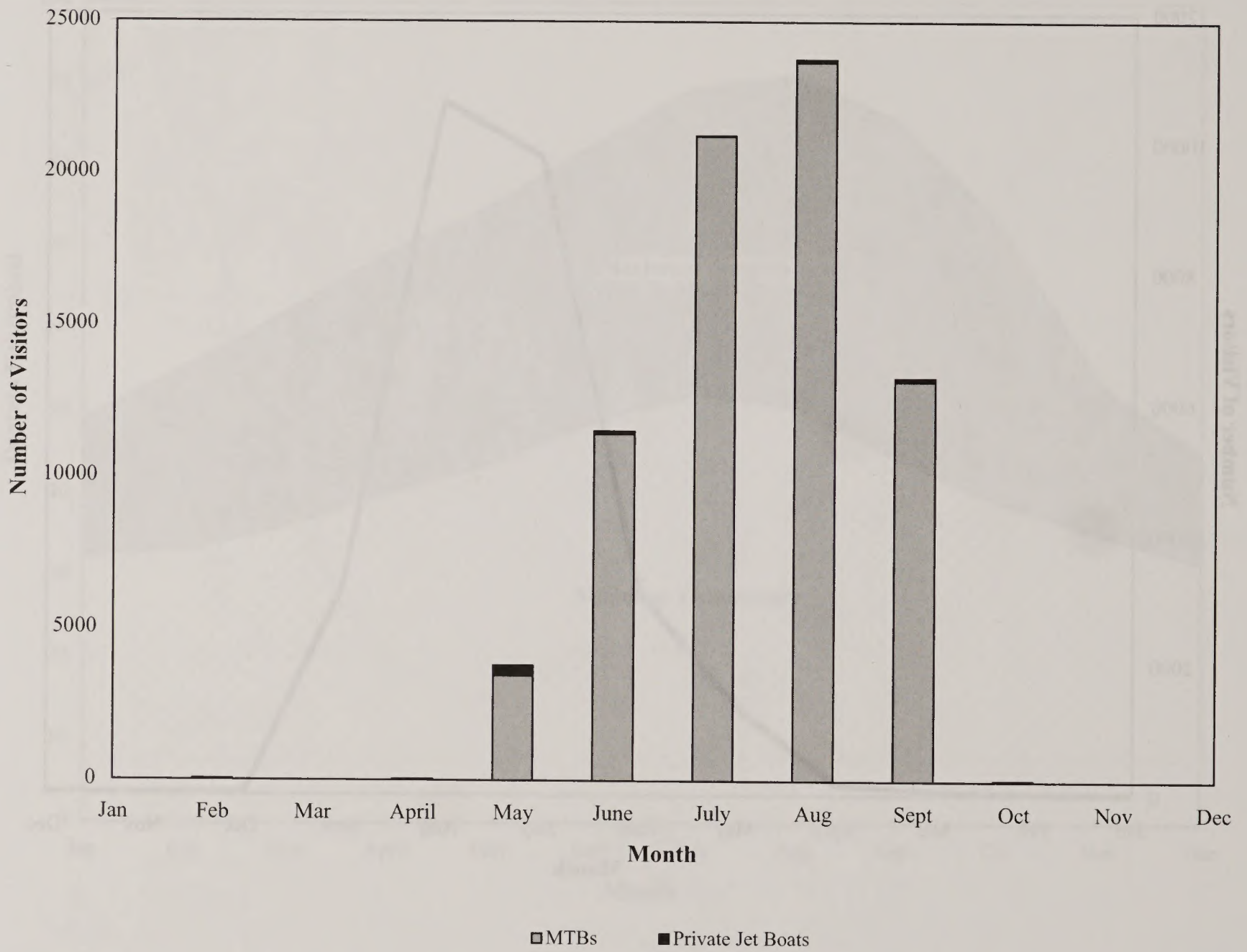
U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Medford District
Hellgate Recreation Area Management Plan and Environmental Impact Statement

Figure 3-3. Nonmotorized Floating in 1991



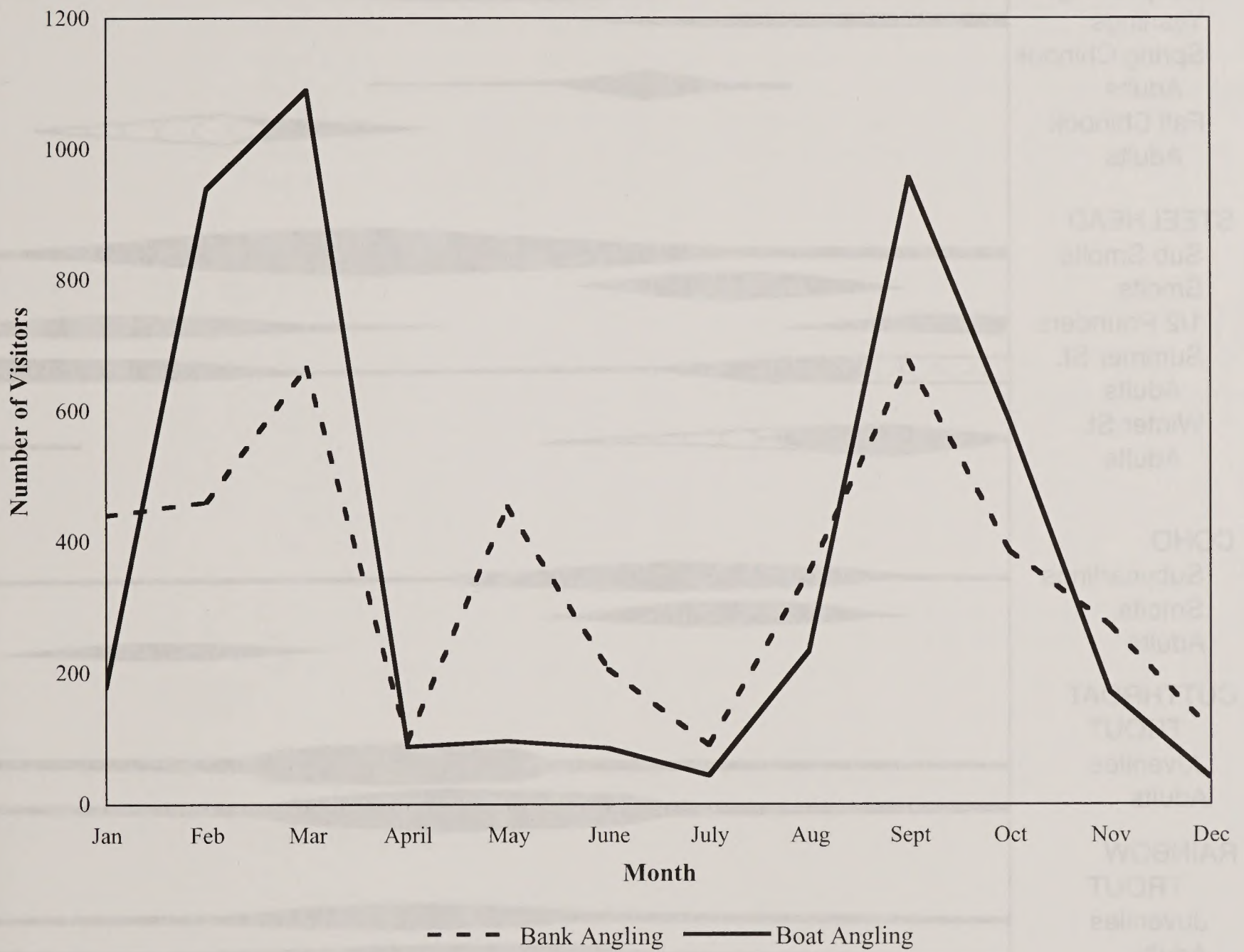
U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Medford District
Hellgate Recreation Area Management Plan and Environmental Impact Statement

Figure 3-4. Motorized Boating in 1991



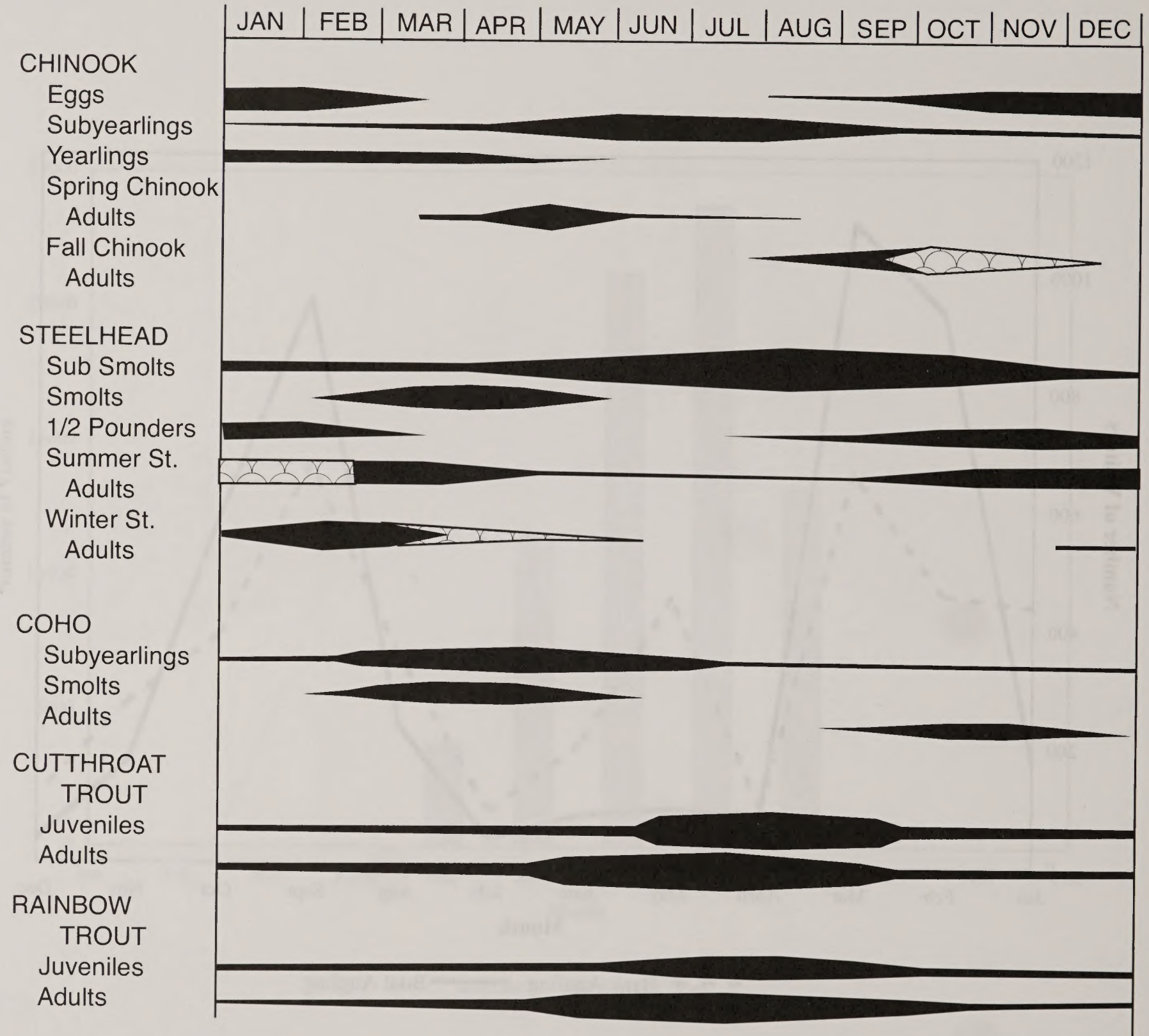
U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Medford District
Hellgate Recreation Area Management Plan and Environmental Impact Statement

Figure 3-5. Bank and Nonmotorized Boat Angling in 1991

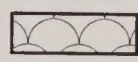



U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Medford District
Hellgate Recreation Area Management Plan and Environmental Impact Statement

Figure 3-6. Salmonid Spawning and Migration



Abundance of Salmonids by time of year in the mainstem
Rogue River from Gold Ray Dam to Grave Creek (KM 202-110, MI 125 - 68).

 Spawning fish  Migration

Modified from Oregon Department of Fish and Wildlife, 1982

May 2000

Chapter 4

Environmental Consequences

Introduction

The proposed project is a large-scale development of a new type of energy storage system, which is expected to be a significant contribution to the development of the energy storage industry. The project is located in a remote area, and the proposed development is expected to have a significant impact on the environment. The project is expected to have a significant impact on the environment, and the proposed development is expected to have a significant impact on the environment. The project is expected to have a significant impact on the environment, and the proposed development is expected to have a significant impact on the environment.

Types of Effects

The project is expected to have a significant impact on the environment, and the proposed development is expected to have a significant impact on the environment. The project is expected to have a significant impact on the environment, and the proposed development is expected to have a significant impact on the environment. The project is expected to have a significant impact on the environment, and the proposed development is expected to have a significant impact on the environment.

The project is expected to have a significant impact on the environment, and the proposed development is expected to have a significant impact on the environment. The project is expected to have a significant impact on the environment, and the proposed development is expected to have a significant impact on the environment.

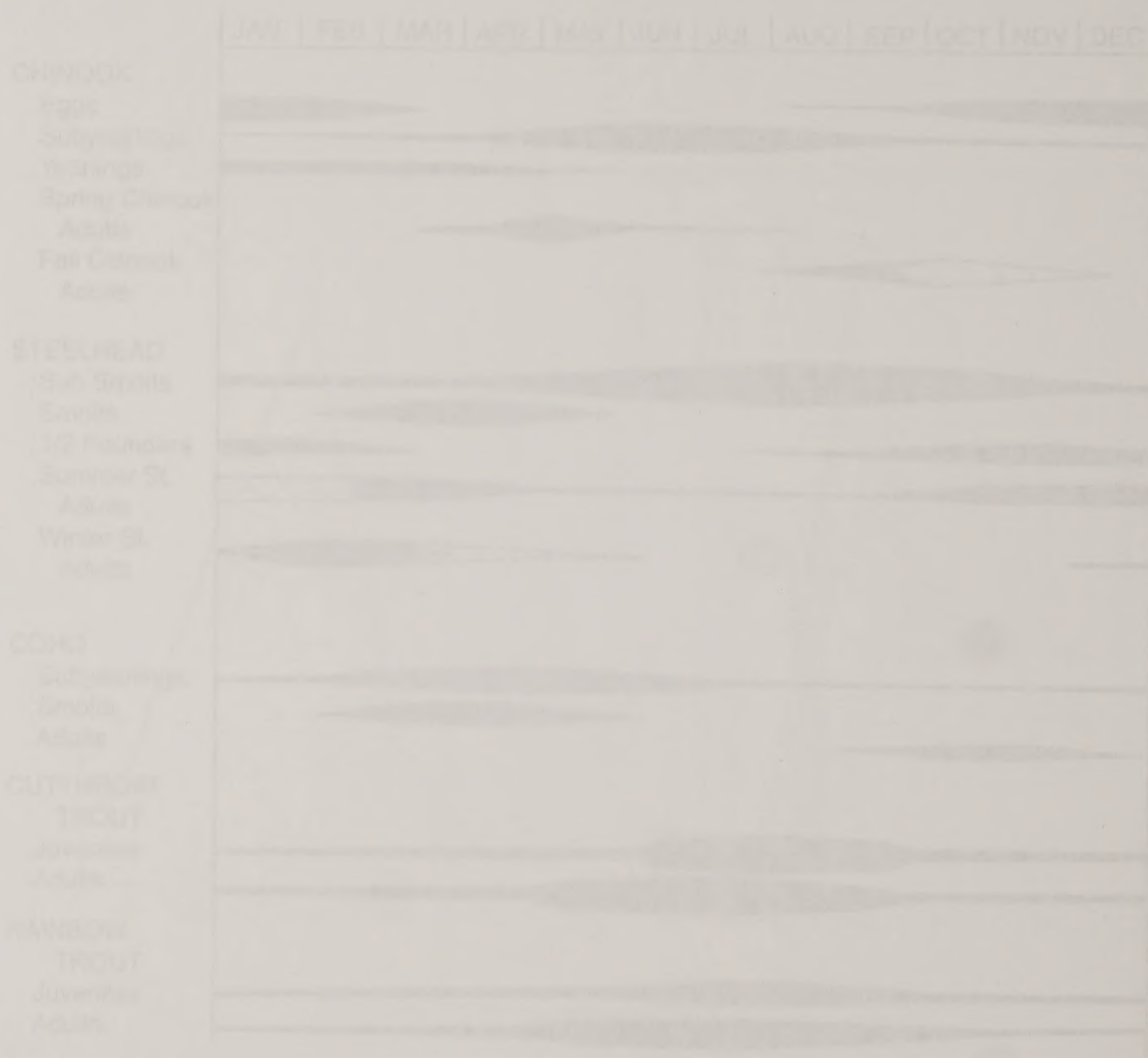
Summary of Effects on the Outstandingly Remarkable Values

Introduction

The project is expected to have a significant impact on the environment, and the proposed development is expected to have a significant impact on the environment.

The project is expected to have a significant impact on the environment, and the proposed development is expected to have a significant impact on the environment. The project is expected to have a significant impact on the environment, and the proposed development is expected to have a significant impact on the environment.

Chapter 4 Environmental Consequences



Abundance of Salmonids by time of year in the mainstem of the Rogue River from Corvallis Dam to Grove Creek (001 202-110, MI 125-55).

Spawning fish Migration

Adapted from Oregon Department of Fish and Wildlife, 1992

Summary of Changes

This chapter has been rewritten to expand the discussion of environmental effects that would occur by implementing the alternatives described in Chapter 2 and are compared to the existing conditions in Chapter 3.

Introduction

This chapter analyzes the environmental impacts or effects of the management actions presented in Chapter 2. The impacts of each alternative on a resource was determined through a comparison of the proposed actions in each alternative to the current conditions presented in the No Action Alternative (Alternative B). Since the Hellgate RAMP/FEIS describes an overall management framework, the environmental consequences are often described in general terms. Subsequent site-specific analysis would be required prior to implementing some of the management decisions. More detailed or site-specific analysis will be prepared in compliance with the National Environmental Policy Act (NEPA), as needed.

Types of Effects

Effects analyzed in this chapter include direct, indirect, and cumulative effects of the proposed actions to the extent they were identifiable for analysis. Direct effects result from activities planned or authorized by the BLM and occur at the same time and place. Indirect effects are caused by these actions and occur later in time or farther removed in distance, but are still reasonably foreseeable. Cumulative effects occur when there are multiple effects on the same values. These are incremental effects of proposed activities or projects when combined with past, present, and future actions, regardless of what agency or person undertakes such other actions.

Effects will be described as having: a beneficial effect (the resource or condition is enhanced/benefitted, or the user group's activity and/or experience is enhanced), no change (no change or little to no effect), or not a beneficial effect (adverse effect).

Summary of Effects on the Outstandingly Remarkable Values

Introduction

The Wild and Scenic Rivers Act of 1968 (WSRA) (Public Law 90-542, Sec. 1b) states:

“It is hereby declared to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geological, fish and wildlife, historic, cultural or other similar values, shall be preserved in a free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations.”

In relation to the outstandingly remarkable values (ORV) that a river possesses, the WSRA also states in Section 10(a):

“Each component of the National Wild and Scenic Rivers System shall be administered in such a manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration, primary emphasis shall be given to protecting its aesthetic, scenic, historic, archaeological, and scientific features.”

The outstandingly remarkable values for the Rogue River, as identified by Congress (HR 1917 September 24, 1968 and HR 1623 July 3, 1968); as described in the *Master Plan for the Rogue River Component of the National Wild and Scenic Rivers System* (USDI 1969); and as described in the 1972 Plan, the *Rogue National Wild and Scenic River, Oregon: Notice of Revised Development and Management Plan* (Federal Register Vol. 37, No. 131, 13408-13416) include the natural scenic qualities, fish, and recreation. Other river-related values that are important, but were not considered outstandingly remarkable at the time, include wildlife and cultural resources (USDI 1992). Only the outstandingly remarkable natural scenic quality, fisheries, and recreation values are addressed in this section. All other river-related values will be covered under specific resources (e.g., wildlife, soils, water), and other site-specific NEPA analysis.

Natural Scenic Qualities

The Rogue River was recognized by Congress in 1968 for its diversity of scenery due to its geology, topography, and relatively undeveloped visual appearance. A study in 1993, *Assessments of Recreation Impacts and User Perceptions on the Bureau of Land Management Recreation Section* (Shindler and Shelby) found that the majority of visitors rated enjoyment of the scenery along the river as very important to the overall quality of their visit. Approximately 90 percent of all visitors rated the existing management and maintenance of the scenery as positive, thus indicating satisfaction and a perception of the scenery as high quality.

The Wild and Scenic Rivers Act's description for a recreation classification segment of river characterizes the acceptable elements for scenery through the following definition:

Recreation River Areas - Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

Additionally, the BLM utilizes the Visual Resource Management (VRM) process, which established a methodology to inventory lands for scenic quality ratings, established a series of management classes, and designed management objectives to minimize apparent changes to the landscape's scenic quality. VRM employs certain mitigating measures to meet these management objectives. These include, but are not limited to, topographic screening, vegetative screening, and utilization of earth tone colors on structures. These are also design factors considered in the maintenance of the visual scene on all private structures covered by BLM scenic easements. Under VRM standards, the planning area was placed in a management Class I, which calls for management actions to be designed so the existing character of the landscape is preserved and any changes do not attract attention.

For analysis purposes, effects to the natural scenic quality ORV will be discussed in general terms based on each alternative's proposed management actions that might affect the geology, topography, or relatively undeveloped visual appearance, realizing that developments are consistent with a recreation classified river segment. These effects may be direct and/or indirect.

Effects Common to All Alternatives

Proposed management actions that do not modify the natural landscape, or that are non-ground disturbing (e.g., establishing use levels, seasons of use, length of stay, MTB regulations, etc.) would not have a direct or indirect effect on the geology, topography, or its relatively undeveloped visual appearance.

All management actions that would potentially modify the natural landscape, or are considered ground disturbing would have an indirect effect on the geology, topography, or its relatively undeveloped visual appearance by simply increasing or decreasing the number of developments along the river. All potential direct effects for these actions would be mitigated through the implementation of the management objectives prescribed for VRM Class I lands and other VRM design criteria, keeping in compliance with the Medford District RMP, as well as the purpose and intent of the Wild and Scenic Rivers Act. Site-specific NEPA analysis would address the potential direct effects to the natural scenic quality ORV in the context of scale and site-specific scenery characteristics when a proposed management action (e.g., developing a new boat ramp) actually occurs. Effects to the natural scenic quality in this perspective must be expressed as either meeting or not meeting these management objectives. Under all alternatives, the VRM management objectives would be met, thus protecting the outstandingly remarkable natural scenic qualities.

Fisheries Resource

The Rogue River was recognized by Congress for its outstanding salmon and steelhead sport fisheries. The 1993 study on recreation impacts and user perceptions (Shindler and Shelby) found that over 60 percent of the visitors to the Rogue came to fish. This fishing occurs year-round and includes fishing from nonmotorized watercraft (drift boats), motorized watercraft (jet boats and drift boats with kickers), and the riverbank .

Fishing regulations, such as bag limits, season-of-use, catch and release, and barbless hooks, are the responsibility of the Oregon Department of Fish and Wildlife, and boating regulations, such as requirements for personal flotation devices and their accessibility, no anchor zones, pass-through zones, slow no-wake areas, private watercraft noise standards, boat speed, and personal watercraft, are the responsibility of the Oregon State Marine Board and will not be addressed in this effects section.

For analysis purposes, effects to the fisheries ORV will be discussed in general terms based on each alternative's proposed management actions that might affect the fisheries resource. These effects may be direct and/or indirect.

Effects Common to All Alternatives

Proposed management actions would have an indirect effect of varying degrees to the fisheries resource by the implementation of some of these actions for all watercraft (e.g., permit requirements, established use limits, permitted trips per day, and other similar regulatory management actions), which might limit the number of individuals actually fishing.

The proposed management action of seasonal use restrictions for motorized tour boats would have a direct effect on the fisheries resource by eliminating the potential for disturbance, except for Alternative D, from that type of use while fall chinook spawn within the planning area.

The implementation of an educational and interpretive program discouraging other watercraft and land-based activities in spawning areas would have a direct effect on the fisheries resource by minimizing the potential for disturbance from that type of use while fall chinook spawn.

Recreation Opportunities

The Rogue River was recognized by Congress for its exciting white water float trips and its outstanding salmon and steelhead fishing. Other recreation activities recognized included: hunting, swimming, hiking, boating, picnicking, camping, and sightseeing. The Wild and Scenic Rivers Act states that a designated river “shall be administered in such a manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values.” The 1993 study on recreation impacts and user perceptions (Shindler and Shelby) found that visitor’s reasons for coming to the Rogue included viewing scenery, rafting and floating, fishing, hiking, camping, jet boating, and a variety of other activities. The study also found that visitors to the river participating in white water floating (91 percent), fishing (57 percent), and riding on an MTB (96 percent) found their experience to be excellent or perfect.

For analysis purposes, effects to the recreation opportunity ORV will be discussed based on the diversity of recreational opportunities found in the planning area. These effects may be direct and/or indirect.

Effects Common to All Alternatives

Proposed management actions across all of the alternatives address a range of recreation opportunities that include: white water floating, fishing (i.e., nonmotorized, motorized, and bank), motorized boating, MTBs, camping, day-use sites, back country byways, watchable wildlife sites, and access (i.e., trails, boat ramps, road access). Based on this continuing diversity of recreational opportunities, there would be no direct effect to the outstandingly remarkable recreational value.

Proposed management actions would have an indirect effect of varying degrees to each recreational opportunity by the implementation of some of these actions (e.g., permit requirements, established use limits, established seasons of use, permitted trips per day, and other similar regulatory management actions) while still providing a diverse range of recreation opportunities.

Effects on Air Resources

Introduction

Measurements of air pollutant levels within the planning area have never been recorded. Potential effects will be analyzed based on the amount of pollution sources expected to be present in the area compared to known source amounts and pollution levels for Grants Pass, Oregon. Pollutants of concern include: fine particulate (PM10), carbon monoxide, visibility, and light scattering which pertains to visibility and PM10 (see Chapter 3, Air Resources) (ODEQ 1983).

Effects Common to All Alternatives

The Oregon Department of Transportation surveys motor vehicle use within the city of Grants Pass. In 1992, the average daily southbound traffic through the city on 6th Street at the intersection with Savage Street was 17,000 vehicles in a 24-hour period (ODOT 1993). The northbound traffic on 7th Street had an average daily traffic of 16,000. This is a total of 33,000 vehicles per average day. Motor vehicle emissions only reach peak effects for PM10 and CO during the winter months. Even at the 33,000 motor vehicle use level, Grants Pass last exceeded an air quality standard in 1991 and never during the summer.

The peak use period in the planning area is May through September. Maximum average daily traffic has been projected to range between 1,490 to 2,300 vehicles, depending on the alternative (Hall 2002). These numbers represent weekend use during the summer. Alternatives that increase visitor use are expected to increase the volume of motor vehicle traffic in the planning area. Higher levels of emissions are possible with higher levels of motor vehicle use. Increases in motorized boating will also add to emissions; however, analysis of pollution emissions from motor boats would be difficult as data on emissions and types of motors in use is not available. Emissions from motorized vehicles are not currently recognized as having a significant effect on air quality in the planning area. Emissions from motorized vehicles typically would not be expected to exceed national or State of Oregon standards.

An analysis of effects to air quality can be made by using traffic numbers projected by alternative. Using the Alternative D (the alternative with the highest use projection) maximum daily traffic projection of 2,300 motor vehicles, traffic in the HRA can be compared to the maximum average daily traffic for the city of Grants Pass. The projected vehicle use in the HRA would be far below that of Grants Pass and would only constitute 7 percent of the number of motor vehicles that operate in Grants Pass on an average day. Therefore, projected maximum use levels in the HRA would not be expected to exceed air quality standards.

Ventilation produced by diurnal winds is a factor that benefits air quality in the summer. The topography of the area typically produces strong upriver winds in the afternoon. This makes rowing difficult, but produces good air mixing and dispersion.

Limited information is available on boating impacts to air quality, with the exception of research conducted for the Lake Tahoe region of California/Nevada. The Tahoe Regional Planning Agency found compelling evidence that watercraft powered by certain types of two-stroke engines degrade water and air quality by discharging oil and gas directly into Lake Tahoe and at highly disproportionate rates compared to other motorized watercraft. Data indicated that watercraft powered by carbureted two-stroke engines emit toxic pollutants (including methyl tertiary-butyl ether, benzene, ethylbenzene, toluene, and xylene) at a rate ten times higher than watercraft powered by other engine types. Carbureted two-stroke engines discharge as much as 25 to 30 percent unburned fuel into the water and subsequently into the air. Consequently, in addition to air quality impacts, water quality is also impacted, since marine engines exhaust through the water. This study further found the potential for increased NOX emissions from motorized watercraft engines was estimated as negligible as compared to the impact of automobile exhaust (Tahoe Regional Planning Agency 1999).

Based on the known motor vehicle use and effects to air quality for Grants Pass, the projected levels of motor vehicle use in the planning area are not expected to create adverse effects to air quality under any of the alternatives. The historic or foreseeable level of motorboat traffic in the Hellgate Recreation Area is not expected to have a substantial effect on regional or local air quality.

Effects to air quality from fire are the same for all alternatives. Effects are primarily in the form of visibility impairment from prescribed burning and wildfire. Prescribed burning is expected to have little to no effect, as the majority of burning is conducted outside the peak recreational period and under weather and atmospheric conditions which maximize smoke dispersion. Wildfire smoke during the summer through the fall fire season would have prominent air resource effects (see Chapter 4, Effects on Fire Risk).

Overall, there would be little to no effect under all alternatives.

Effects on Fire Risk

Introduction

The natural role of fire in the Hellgate Recreation Area (HRA) has historically been that of frequent, low-intensity fires. Fire suppression has created a relatively fire-free condition. As a result, vegetation within the river corridor is becoming denser and dead fuels are accumulating.

Fire protection and suppression in the HRA is accomplished through contract with Oregon Department of Forestry (ODF). ODF, in consultation with the BLM, establishes regulated use closures when conditions in the HRA reach levels where a fire start could endanger life or property. In the event of a fire start within the planning area, response from ODF is immediate in order to minimize damage to soils, watersheds, ORVs, and wildlife habitat. Currently, there is not a fire and fuels management plan for the Hellgate Recreation Area, however, such a plan is proposed.

Effects on fire consist of change in the wildfire risk from human causes. Risk is the causative agent of a fire start. Risk may change as use increases, access increases, and types of use change.

Effects Common to All Alternatives

Elements of each alternative that have the potential to change the current wildfire risk level include change in visitor use of the land areas along the river. This includes change in level of use, access, and types of use.

Actions that increase the dispersion of visitor use over a wider area increase the wildfire risk. Human activities that have the greatest influence on wildfire risk include camping, hiking, and vehicle access.

Development of trail systems and float-in campsites would increase wildfire risk because of extremely limited access and increased detection and response time in wildfire situations.

Overall, there would be little to no effect under all alternatives.

Alternative A

Under Alternative A, the wildfire risk level would decrease as a result of proposed management actions. On-river visitor use would decrease. One new trail system would be developed and one existing trail would be improved and expanded. Primitive camping would not be allowed. Six day-use only sites would be developed. Vehicle access would be allowed in two areas.

Alternative A would have a beneficial effect.

Alternative B - No Action

Under Alternative B, the wildfire risk would remain at the current level and there would be no additional effects. Vehicle access would be allowed in five areas. If use levels increase, undeveloped and informal camping and trail use by visitors would increase the level of wildfire risk.

There would be little to no effect under Alternative B.

Alternative C

Under Alternative C, the wildfire risk would increase above the current level. Three new trails would be developed and four trails would be improved or expanded. Five of these trails would be open to overnight use. Eighteen developed camp areas would be specified, including three float-in access sites. Six day-use only sites would be developed. The development of new day-use sites mainly coincides with existing informal use areas; however, this would lead to an increase over the current level of use for these areas. Three fishing access sites would be developed and vehicle access would be allowed in seven areas.

Alternative C would not have a beneficial effect.

Alternative D

Alternative D would produce the highest increase in wildfire risk. Visitor access and accessibility to the area would substantially increase above the current level. Nine new trail systems would be developed and four would allow overnight use. Eight trail systems would be improved and four would allow overnight use. Twenty-six developed camp areas, including five float-in access sites, would exist. Ten gravel bars would be opened to vehicle access. Seven day-use only sites and five fishing access sites would be designated.

Alternative D would provide the highest number of developed sites. This would enhance fire prevention and suppression planning. However, this increase in the number of visitors accessing a wider area of the landscape would increase the number of potential sources of human-caused wildfire.

Alternative D would not have a beneficial effect.

Alternative E - Proposed Action

The Proposed Action increases the risk of wildfire occurrence above the current level. This alternative would increase visitor access over a wider area and increase the visitor use level. Visitor access would increase in numbers and in the amount of accessible area through the development of trail systems, float-in-only camping sites, and day-use sites.

Elements of this alternative that impact fire risk include camping areas, trails, day-use areas, and vehicle access areas. Fourteen designated developed camp areas have been identified. Primitive camp areas or corridor areas open to camping would occur in the Dunn Reach from Hog Creek to Grave Creek on both sides of river. Two new trails would be developed and five trails would be improved or expanded. BLM lands in the river corridor would be open to primitive day-use, unless otherwise posted. Developed day-use only areas would decrease to six sites. Vehicle access areas (street-licensed vehicles only) would remain at five gravel bars.

Trail systems would aid in increasing human use and dispersing use over a wider area. The improvement of float-in camping sites would increase use. These sites increase wildfire risk because of extremely limited access and increased detection and response time in wildfire situations. The development of new day-use sites mainly coincides with existing, informal use areas; however, this would lead to an increase over the current level of use for these areas.

There would be little to no effect under the Proposed Action.

Effects on Soils

Introduction

In the scoping process, soil erosion (and sedimentation) was identified as an issue of concern. Bank erosion results from several natural causes, including high flows, saturated soils, stream channel changes, stresses at tributary entry points, and several human causes, including riparian vegetation removal, man-made structures, flood control, stock animal trampling and hoof shear, and power boat wake waves. In identified erosion sensitive areas, power boat wake waves are a contributing factor to erosion, but are not the “primary causative agent” (Klingeman et al. 1993).

Riverbank erosion is variable, but generally not a problem as 95 percent of the banks are stable and not subject to erosion (Klingeman et al. 1993). Soil loss along the riverbanks in the identified erosion sensitive areas would be affected by proposed management actions (see Chapter 3, Soils). These areas are scattered throughout the planning area and are defined as having limited or severe erosion potential. The soils in these erosion sensitive areas are dominantly alluviated sands and silts deposited during past floods and high water events. Environmental effects that would occur in the planning area as a result of implementing any alternative would be in the form of soil disturbance, erosion, and sedimentation.

Erosion and deposition is a natural alluvial process. While 5 percent of the riverbank in the Hellgate Recreation Area is erodible, only 1.7 percent of the riverbank has any erosional effect from power boats and other human causes (Klingeman et al. 1993). Therefore, the sediment in the river is by far predominately from sources other than the local river banks. No-wake zones will be used wherever operationally feasible. Monitoring (see Appendix D) will determine if bank erosion is substantial and, if so, mitigating measures will be initiated.

Erosion of stream banks may also be caused by local concentration of foot traffic forming trails on riverbanks. These bank climbing trails are generally the result of floaters stopping near a river bank and hiking up and over the bank. Other users, such as campers and bank anglers, may also climb down the bank to access the river. The degree of erosion and sedimentation resulting from these activities is minor because they are very localized (and would continue to be under any of the alternatives). Also, most sites where this occurs are comprised of bedrock or very coarse textured alluvial material with rapid infiltration capacity. This results in very little, if any, concentrated runoff during storms. However, on alluvial banks, since most of these sites are quite steep, climbing on banks mechanically dislodges soil particles, which drop to the base of the bank and are then carried away by high river flows. There are a few banks made up of truncated colluvial soil that are moderate or fine texture. These banks are most susceptible to trail erosion. Less than one tenth of one percent of the river bank is used for climbing.

To determine effects to soils, it is assumed that levels observed in the Klingeman study were indicators of current conditions. Therefore, comparative increases or decreases in power boat use with or without no-wake zones and other wave erosion mitigation would result in changes in degree of bank erosion at erosion sensitive areas. Effects are comparisons to current use (Alternative B).

Effects Common to All Alternatives

Erosion sensitive areas would be impacted by boat wake waves and limited foot traffic. A negligible amount of fine sediment would be added to the river in the erosion sensitive areas and would cause a minimal effect.

Existing cumulative effects are moderate at current levels and would remain moderate for any of the alternatives.

Alternative A

There would be a moderate reduction in MTB trips (from 19 to 12 trips per day), one large MTB would remain in the fleet, and there would be no restrictions in erosion sensitive areas. Commercial motorized angling would be limited to one permit allotted two trips per day. Two special boating events would be allowed. As a result, there would be a minimal reduction in erosion and sedimentation at the erosion sensitive areas in the short and long term. Sediment would be hardly measurable downstream from the erosion sensitive areas. Nonmotorized floating would be limited to 120 boats per day and nonmotorized boat angling would be limited to 30 boats per day. There would be a net reduction in camping and day-use. This would result in a minimal decrease of erosion due to bank climbing.

Alternative A would have a beneficial effect.

Alternative B - No Action

Management actions would be the same as those used currently – no requirements in erosion sensitive areas, one large MTB would remain in the fleet, and any new special boating event would be subject to NEPA analysis. There would be no change in effects from current conditions where 5 percent of the riverbank is subject to erosion (Klingeman 1993). Of that 5 percent, 1 percent is at a severe level and 4 percent is at a limited level. Nonmotorized floating and angling, and motorized boating would not be limited. There would be no additional impact to bank erosion, unless use increases.

There would be no little to no effect under Alternative B.

Alternative C

This alternative allows for a relatively low amount of motorized boating activity (12 MTB trips per day, 3 commercial motorized angling permits allowed 2 trips per day, and private motorized boating restricted if use limits are reached), no special boating events would be allowed, large MTBs would be removed from the fleet, and erosion sensitive areas are identified for special mitigation. In the short and long term, slight reductions in erosion and sedimentation at erosion sensitive areas would result under this alternative. Sediment would be hardly measurable downstream from the erosion sensitive areas. Nonmotorized floating use would be limited to 500 boats per day, but there would be a net increase in camping and day-use. This would result in a minimal increase of erosion due to bank climbing.

Alternative C would have a beneficial effect.

Alternative D

Alternative D would allow the greatest increase in motorized boating activities. This proposal would allow MTB use to increase by seven trips per day (from 19 to 26) and would allow the two large MTBs to remain on the river. Private motorized boating would not be limited and commercial motorized boat angling permits would increase from three to 30. Special boating events could increase from two to five. Although mitigation measures would be required in erosion sensitive areas, the level of increase in motorized boating would offset the benefits. As a result, for short and long term, there would be a slight increase in erosion and sedimentation in the Hellgate Recreation

Area. This would be accompanied by a very slight increase in fine sediment downstream from the erosion sensitive areas. Nonmotorized floating and boat angling use would not be limited. There would be a net increase in camping and day-use. This would result in a minimal increase of erosion due to bank climbing.

There would be little to no effect under Alternative D.

Alternative E - Proposed Action

The Proposed Action and Alternative B allow the same number of MTB trips (maximum of 19 trips per day) and the same requirements for special boating events (two existing events continue and new events are subject to NEPA analysis). The major difference between the Proposed Action and Alternative B is that the Proposed Action identifies erosion sensitive areas for special mitigation. Therefore, in the short and long term, the Proposed Action would result in slight reductions in erosion and sedimentation at erosion sensitive areas. Sediment would be hardly measurable downstream from the erosion sensitive areas. Nonmotorized floating and boat angling use would be limited in the future, if use limits are reached. There would be an increase in camping and a decrease in day-use. This would result in no net change in erosion due to bank climbing.

The Proposed Action would have a beneficial effect.

Effects on Water

Introduction

The Hellgate Recreation Area is located downstream of the cities of Medford and Grants Pass, as well as several smaller riverside communities. These communities affect the quality of the water entering the planning area and are outside the authority of the BLM and the scope of this plan.

This portion of the Rogue River has been listed as “Water Quality Limited” by the Department of Environmental Quality (DEQ), under section 303(d) of the Clean Water Act. It was listed under three categories: summer temperature, summer bacteria, and pH (fall, winter, spring). Of these categories, summer bacteria would affect the health of water recreationists. Water recreation may also have a slight effect on summer bacteria levels, depending on the intensity of the recreation activity. The other two categories, temperature and pH, would have little to no effect on seasonal recreation in the Hellgate Recreation Area. Common recreation activities have little to no effect on summer temperature and pH.

Effects ratings represent the degree that a recreation activity may affect the existing disease-causing organism level. It is assumed that levels of fecal coliform found in the 303(d) process were indicators of current use upstream of the Hellgate Recreation Area. Effects ratings compare proposed actions to current use, Alternative B. For the last ten years, there has been no clear trend, increase or decrease, in river use that could have an effect on fecal coliform or disease-causing incidents from water contact. It is assumed there is a relationship between the degree of use by recreationists on the river and river banks, and fecal coliform counts in the water.

Effects Common to All Alternatives

All water and riverbank use in locations without approved restroom facilities available would have some effect on water-borne disease- or infection-causing organisms.

Alternative A

In Alternative A, nonmotorized floating would be limited to 120 boats per day in the Dunn Reach and nonmotorized boat angling would be limited to 30 boats per day in both reaches. As a result, there would be a minimal improvement in water quality by the small decrease in human waste in the water and on the nearby riverbank area. Human waste pack out would be required for all users. There would be no limits on the size of camping groups. Primitive camping would not be allowed and eight developed camp areas would be designated. This would provide minimal improvement in water quality because of a decrease in human waste on the riverbank area. No fishing access sites would be developed, which would result in a minimal improvement in water quality.

Alternative A would have a beneficial effect.

Alternative B - No Action

Under Alternative B, there would be no net change in water quality, if overall use remains similar to existing use levels. However, use would not be limited in this alternative and could increase. If non-regulated use increases by approximately 10 percent over existing use, there would be small localized effects in water quality.

Commercial users only would be required to pack out human waste. There would be no limits on the size of camping groups. Primitive camping would be allowed from Hellgate Recreation Site to Grave Creek on the right bank, on Rocky Bar, and from Alameda Park to Grave Creek on the left bank. Seven developed camp areas would be designated. There would be no change from existing conditions.

There would be little to no effect under Alternative B.

Alternative C

Nonmotorized floating would be limited to 500 boat trips per day. Nonmotorized boat angling would be restricted if use limits are reached. If use increases by approximately 10 percent over existing use, there would be small localized effects in water quality. Primitive camping would increase slightly as the area from Hellgate Recreation Site to Grave Creek, would be on both sides of the river. Eleven additional developed camp areas would be designated, decreasing human waste on the riverbank. There would be a slight decrease in the number of primitive and developed day-use sites. Fishing access sites would increase slightly, resulting in a slight decrease in water quality. Human waste pack out would be required for all users and group size would be limited to 30, helping to nullify actions that decrease water quality.

Alternative C would have a beneficial effect.

Alternative D

Under Alternative D, nonmotorized floating and angling would not be limited. If use increases by approximately 10 percent over existing use, there would be small localized effects in water quality. Primitive camping would increase slightly as the area from Hellgate Canyon to Hellgate Recreation Site would be opened to camping. As a result, there would be a small decrease in local water quality by the addition of human waste in the water and on the nearby riverbank. Nineteen new developed camp areas would be designated, causing a decrease in human waste in the riverbank area. Primitive day-use only sites would decrease by five areas and the number of developed day-use areas would not change. Fishing access sites would increase by one site. This would result in a

slight decrease in local water quality. Human waste pack out would be required for all users and group camp size would be limited to 30 people.

Alternative D would not have a beneficial effect.

Alternative E - Proposed Action

Nonmotorized floating and angling would be limited in the future, if use limits are reached. A use increase of approximately 10 percent over existing use, would result in small localized effects in water quality. Primitive and developed camping would increase as the entire Dunn Reach would be opened to primitive camping and five new developed camp areas would be added. These uses would balance a decrease in water quality with an increase to result in no change in water quality. Primitive day-use only areas would decrease by five and developed day-use only areas would decrease by one. This would result in a slight increase in local water quality. Fishing access would decrease by one site. Human waste pack out would be required for all users and group size would be limited to 30 people.

The Proposed Action would have a beneficial effect.

Effects on Riparian Areas, Wetlands, and Flood Plains

Introduction

Under the Northwest Forest Plan and the Medford District RMP, riparian areas, wetlands, and flood plains are within Riparian Reserves or part of Riparian Reserves. The two plans list the following components of Riparian Reserves: 1) all riparian vegetation, 2) all 100-year flood plains, and 3) all wetlands. Riparian Reserves extend at least 300 feet on each side of the Rogue River.

Riparian Reserves are a land allocation set aside for management under the Aquatic Conservation Strategy (ACS). The ACS includes nine objectives that provide direction to “maintain and restore” aquatic habitat and habitat of riparian-dependent species (USDA and USDI 1994a).

These objectives address:

- Spatial and temporal connectivity.
- Physical integrity of the aquatic system.
- Water quality.
- Sediment regime.
- In-stream flows.
- Timing, variability, and duration of flood plain inundation and water table elevation.
- Species composition and structural diversity of plant communities.
- Habitat of native plants, invertebrates, and vertebrates.

Riparian Reserves are one component of the ACS. Other components are key watersheds, watershed analysis, and watershed restoration. Of these components, Riparian Reserves and watershed analysis pertain to the Hellgate Recreation Area. Watershed analysis was completed for the HRA in 1999.

Activities that could affect Riparian Reserves include: camping, day-use, camping group size, fire pan requirements, trails, and vehicle access areas. Activities within developed or designated

settings could have less impact on Riparian Reserves than activities conducted in a primitive setting.

Human waste pack out requirements will reduce onsite human waste, but will not eliminate it. At a minimum, commercial users will be required to pack out waste.

All primitive camping and day-use, for the purpose of analysis, are considered together. These activities may be located close to the river on the riverbanks. Developed camping (with toilets) is located away from the river and its banks; therefore, human waste would not be located in or near the river.

Effects Common to All Alternatives

Recreational activities that take place in Riparian Reserves may include camping, angling, and hiking. These activities may have effects on Riparian Reserves depending on the use levels resulting from the varying degrees of recreation opportunities offered under the alternatives. Recreational activities have historically been in specific areas in the Hellgate Recreation Area. Some Riparian Reserves could contain primitive or developed areas, as proposed in the alternatives. A monitoring plan would be implemented to determine if recreation activities are negatively impacting water quality. No new areas of disturbance from human visitation should occur.

Potential effects could include soil trampling, loss of surface organic matter, and loss of protective cover vegetation, which may lead to erosion. In order to meet the ACS, activities that cause such effects would be mitigated by appropriate methods, such as blocking affected area(s) from public access, decompacting soil, fluffing up and raking back detached soil to cover exposed mineral surface, replacing organic matter, and seeding or planting with appropriate native plants. Though the mitigating actions would occur, there could be a short-term period in which these effects may occur before such sites are located and mitigation is planned and implemented.

The effects listed in each alternative would have short-term effects as compared to Alternative B, the No Action Alternative.

Alternative A

Under Alternative A, watercraft and visitor use numbers would be reduced to 1985 levels. Effects to Riparian Reserves in this alternative would be similar to Alternative B. Group size would not be limited at camping areas. Larger groups could cause an increase in the size of the trampled areas. Two gravel bars would be open to vehicle access, compared to five in Alternative B. This would result in a substantial reduction in foot and wheel traffic over roughly half the area affected under existing conditions.

Campfire use would be allowed without fire pans. If fires are placed in areas with vegetation or if large campfires released burning embers, risk of wildfire could increase. A resulting wildfire could eliminate the vegetation within the Riparian Reserve.

Alternative A would have a beneficial effect.

Alternative B - No Action

Group size would not be limited at camping areas. A substantial increase in visitation over time could lead to an increase in size of trampled areas.

Under the No Action Alternative, campfire use would be allowed without fire pans. If fires are placed in areas with vegetation or if large campfires released burning embers, risk of wildfire could increase, especially during a drought year. A resulting wildfire could spread up slope into the forests above the river or into private holdings.

Vehicular access and informal exploring and hiking (social trailing) are assumed to remain at current levels. An increase in visitor use would cause impacts to Riparian Reserves.

There would be little to no effect under Alternative B.

Alternative C

Limiting group size in this alternative to 30 campers per site would provide the beneficial effect of maintaining the level of disturbance, even if a considerable increase in future visitation should occur.

The use of fire pans for campfires would reduce the risk of wildfire and reduce potential for damage to the Riparian Reserve.

Seven gravel bars (seven areas versus five) would be allowed for vehicle access. Impacts from vehicle use would increase slightly through surface disturbance from tires.

Establishing four new designated hiking trails would reduce area disturbance from social trailing, as long as social trails are blocked and eliminated.

Alternative C would have a beneficial effect.

Alternative D

Limiting group size in this alternative to 30 campers per site would provide the beneficial effect of maintaining the level of disturbance, even if a substantial increase in future visitation should occur.

The use of fire pans for campfires would reduce the risk of wildfire and reduce the potential for damage to the Riparian Reserve.

Impacts from vehicle access would be dramatic in comparison to the No Action Alternative. Ten gravel bars (ten areas versus five) would be opened for vehicle access. Areal extent of vehicle impacts could potentially increase by 50 percent. Visibility of vehicle use would be present throughout the corridor leading to the potential for visitors to assume that all areas in the Hellgate Recreation Area are open to vehicles.

The number of designated hiking trails proposed under Alternative D would be the highest of any alternative. This equates to a potential substantial reduction in trampling, at least in the areas where social trailing is common, because most designated trails would be located outside the Riparian Reserve.

Alternative D would have a beneficial effect.

Alternative E - Proposed Action

Limiting group size in this alternative to 30 campers per site would provide the beneficial effect of maintaining the level of disturbance, even if a significant increase in future visitation should occur.

The use of fire pans for campfires would reduce the risk of wildfire and reduce the potential for damage to the Riparian Reserve.

Impacts from vehicle access on gravel bars would be the same as in Alternative B, since the same number of areas would be permitted.

A beneficial effect would be provided from the designation of hiking trails in the Hellgate Recreation Area. Visitors would be focused on travel along appropriately-sized trail beds, rather than social foot paths that were established without regard to disturbance effects within the Riparian Reserve. Most designated trails would be located outside the Riparian Reserve.

Alternative E would have a beneficial effect.

Effects on Botanical Resources

Introduction

Although the entire length of the Hellgate Recreation Area near the river has not been surveyed, enough information is known through surveys or habitat requirements to formulate assumptions regarding the potential for effects or impacts on special status or survey and manage species. Most known populations are within the 1/4-mile river corridor, but none are found on the beaches or shoreline of the Hellgate Recreation Area; although, habitat for such species does exist. Since any new development projects will be covered by site-specific NEPA analysis, any effects will be handled under separate documentation tiered to this EIS. Because of this, there will be no effect on the federally-listed, *Fritillaria gentneri*, under this Proposed Action.

The effects discussed in this section are mostly related to noxious weeds and native vegetation in general.

Effects Common to All Alternatives

Effects to the botanical resources in the Hellgate Recreation Area are limited to those associated with recreational uses along the shoreline. No direct effects from boat traffic are known. Indirectly, boat usage does add to the shoreline visitation numbers, but the largest number of visitors are motorized tour boat passengers, which do not stop along the shore.

Camping and day-use (from boats or from the road) have historically been in specific areas in the Hellgate Recreation Area. Because these areas are highlighted in the alternatives to become designated primitive or developed areas, no new areas of disturbance from human visitation should occur. Effects should not be considerably different from those found under the current condition at locations mentioned in any of the alternatives (see Alternative B). Since no special status or survey and manage species occur in these day-use or camping areas (or no habitat exists), there would be no effects to these species.

Cumulative effects on vegetation would be related to increases in visitation over time, both upriver and through the Hellgate Recreation Area, if other recreational areas adjacent to the Rogue River are established. Increases in visitation would be related to private boating and activities accessed by road or trail, since commercial motorized boating activities would be restricted. Effects would be directly linked to any significant increases in visitor use.

Changes in activities upstream involving development, agricultural practices, or wastewater treatment on non-federal lands, could affect flow levels. Primarily, the main effect may be an

increase in sources of noxious weeds, which could travel downstream through the Hellgate Recreation Area.

Alternative A

Effects to vegetation in this alternative would be identical to Alternative B, except for campfire use and vehicle access. Under Alternative A, campfire use would be allowed without fire pans, which in areas of river cobble should not be a problem. If fires are placed in areas with vegetation or if large campfires released burning embers, risk of wildfire could increase, especially with drought conditions. Existing native vegetation could be killed or weakened due to severe fire behavior and wildfire could spread up slope into the forests above the river or into private holdings.

Only two areas would be open to vehicle access, compared to five in Alternative B. This would mean a decrease in potential spread of noxious weeds and vegetation damage caused by these vehicles over potentially half the area. Also, with less visibility of vehicle use, there may be less impetus for vehicle trespass into areas not opened for use.

One new trail would be developed, providing a slight benefit to vegetation.

Alternative A would have a beneficial effect.

Alternative B - No Action

The effects on vegetation found to occur under current conditions at camping, primitive, and day-use areas are caused by trampling, which weakens or kills native vegetation. Also, noxious weed introduction can occur, where native vegetation can be eliminated by invasive species, especially in disturbed areas. Since group size would not be limited at camping areas, a substantial increase in visitation over time could lead to an increase in size of trampled areas or numbers of noxious weed populations. Weed introductions would most likely be associated with newly trampled areas.

The use of firepans for campfires would reduce the risk of wildfire and hence damage to vegetation from severe fire conditions.

Five areas would be opened to vehicle access. Vehicle effects could include damage to vegetation and introduction of noxious weeds from vehicle tires. Weedy species do have a competitive advantage in river cobble areas where species, such as purple loosestrife, Himalayan blackberry, knapweeds, yellow clover, and yellow starthistle, can be found in various locations along the Rogue.

Currently, there are no formal trails on BLM-administered lands in the Hellgate Recreation Area. Social trailing is apparent, which disperses foot traffic instead of focusing it on a designated, appropriately-sized trail bed. Effects to vegetation could include trampling and introduction of noxious weeds, as well as erosion from poorly placed social trailing.

There would be little to no effect under Alternative B.

Alternative C

Limiting group size in this alternative to 30 campers per site would provide the beneficial effect of maintaining the level of trampling and noxious weed introduction potential to a fixed level in camping areas, even if a significant increase in future visitation should occur.

The use of firepans for campfires would reduce the risk of wildfire and hence damage to vegetation from severe fire conditions.

Impacts from vehicle use would increase through damage from tires and increased area of weed introduction because more areas (seven areas versus five) would be allowed for vehicle access than currently.

Establishing designated hiking trails under this alternative would provide favorable effects to vegetation in the form of less trampling and decreased weed sources from social trailing, as long as social trails are blocked and eliminated.

Alternative C would have a beneficial effect.

Alternative D

Effects to vegetation would be identical to Alternative C for group size and campfire restrictions. Impacts from vehicle access would be the most dramatic in comparison to Alternative B, since the largest number of vehicle access areas (10 areas) would be designated. Visibility of vehicle use would be present throughout the corridor leading to the potential for visitors to assume all areas in the Hellgate Recreation Area are open to vehicles.

Alternative D would provide the highest number of designated hiking trails, in comparison to Alternative B. This equates to a potential reduction in trampling and weed introductions, at least in the areas where social trailing is common.

Alternative D would not have a beneficial effect.

Alternative E - Proposed Action

Effects to vegetation would be identical to Alternatives C and D for group size and campfire restrictions.

Impacts from vehicle access would be identical to Alternative B, since the same number of areas would be permitted. With a small number of areas designated, the visibility of vehicle use will be much less, hence visitors would not assume all areas are open.

A beneficial effect would be provided from the designation of hiking trails in the Hellgate Recreation Area. Visitors would be focused on travel along appropriately-sized trail beds, rather than social foot paths that were established without regard to vegetation damage or erosion potential.

The Proposed Action would have a beneficial effect.

Effects on Fisheries

Introduction

Indicators are used to determine the degree of adverse or beneficial effects to fish populations and habitat. Indicators include disturbance to redds, eggs, fry, or spawning behavior. Fall chinook are the primary fish species using the Hellgate Recreation Area and are used as an indicator species to represent the health of the fishery. The life histories of other fish species coincide minimally with

recreational river use. Fall chinook population health is measured by survival, production, and habitat quality and quantity. A general assumption is the level of visitor use and watercraft use above the current level may disturb fall chinook. Adult spawning could be affected from increases in MTB traffic, bank and boat angling, and private motorized boats, especially when these increases extend into the spawning season.

Many species have been listed by the Bureau of Land Management to have Special Status. The BLM Manual 6840 - Special Status Species Policy includes Rogue River fall chinook and establishes the limitations on adverse impacts to the chinook population. BLM policy is to protect the fall chinook population with the same level of protection afforded a threatened or endangered species. This includes no harm or harassment to fall chinook during all life stages: courtship, spawning, rearing, and migration. The BLM intends to prohibit activities that harm or harass the fall chinook in order to maintain consistency with this standard and policy. The determination to prohibit MTB activity at any time is based on the standard not to harm or harass one pair of chinook in courtship, eggs, or young fish (up to 30 days after hatching). Fall chinook salmon are of primary concern from October 1 to April 30.

Adult and juvenile coho salmon live in tributary streams and do not reside in the planning area. They are transitory and quickly migrate through the planning area. Juvenile salmon migrate mostly at night when there is no recreation activity. No coho spawning or rearing occurs in the planning area. Consequently, coho populations and habitat are maintained in their baseline condition and no degradation of either occurs.

Past fishery research indicates juvenile anadromous salmonid survival and distribution is not hindered by recreational activity. One of the major issues examined in the research was stranding of juvenile fish on the shoreline during boating activity. This concern was addressed intensely and showed no impact to juvenile fish from boating. Extensive research has not documented an effect on salmon or steelhead trout from boating activity (see Chapter 3, Fisheries). This project was peer-reviewed by an interagency team of western Oregon senior fishery biologists who agreed with the conclusion of no effect to coho salmon population or habitat from recreational activities. As expressed in the past by the BLM and ODFW, the focus of effects is on chinook salmon. Based on this information, it is determined recreational activities have no effect on coho population or designated critical or essential fish habitat.

Effects Common to All Alternatives

Angler numbers are fairly constant throughout the year, although the number of boat anglers is highest from August to November and January to March. Boat anglers anchor and incidentally walk on the redds, along with the bank anglers. Bank and boat angling could potentially produce mortality to chinook eggs when anglers walk on the redds. Efforts would be made to educate anglers and other river users about the presence of redds and the possible impacts to eggs from walking on the redds. Disturbance to spawning behavior from all angling occurs infrequently and is not a major concern. Fish avoid anglers and can move to other areas to spawn, unless there is repeated disturbance to the same pair of spawners.

Commercial motorized angling and private motorized boat numbers are highest from May to September and lowest from October to April. Private motorized boats and drift boats with kickers (outboard motors used to move upstream) would not have a beneficial effect from October to April by causing: (1) direct egg mortality through disturbance of the gravel in the redds, (2) indirect fry mortality by chasing fry from the redds after emergence and moving gravel in redds, or (3) a disturbance to adult salmon spawning behavior. It is estimated the number of private motorized boats would be low, yet the time of operation can produce egg or fry mortality or adverse disturbance to spawners. There would not be a beneficial effect from private motorized boating on fall chinook adults, eggs, or fry. Overall, the fall chinook population has remained stable, despite increases in recreation activity.

There is a direct beneficial effect from Lost Creek and Applegate dams to fall chinook the HRA. The dams release cold water and higher flows during the hot summer months. There is no beneficial effect to Essential Fish Habitat from all recreation activities.

Alternative A

Under Alternative A, fall chinook spawning areas would not be designated. Private motorized boating, nonmotorized boat floating and angling, and special boating events would be allowed year-round, although use limits would be set for all nonmotorized boating (120 boats per day for floating and 30 boat trips per day for nonmotorized boat angling). Commercial motorized angling and motorized tour boats would be allowed to operate from May 1 to September 30. Two special boating events would be allowed.

Direct or indirect effects from anglers would be negligible for fall chinook survival and production of adults, eggs, or fry. Intensity and duration of incremental effects to fisheries is expected to be the same as Alternative B. Cumulative effects to fisheries within the HRA would be the same as Alternative B. Historic recreation use, combined with mining, forest practices, and agriculture, have had no cumulative effects on the historical fall chinook population or habitat. Overall, the fall chinook population has been stable in the past, notwithstanding the increase in recreation activity.

Alternative A would have a beneficial effect.

Alternative B - No Action

The present MTB period of use precludes any direct or indirect effects to all life history stages for fall chinook. Private motorized boats, angling boats, and bank anglers would not have a beneficial effect when fall chinook eggs are in the gravel and fry are around the redds from October 1 to April 30. Private motorized boat levels would be low and there would be little to no effect to fall chinook eggs and fry. Presently, private motorized boats move over fall chinook redds and could produce a mortality to eggs, according to the results from the Alaska research (Horton 1994). Additionally, fry would be easily displaced by activity occurring over the redd.

Direct or indirect effects from anglers are negligible for fall chinook survival and production of adults, eggs, or fry. Intensity and duration of effects to fisheries is expected to be short, less than benign, and incidental. Cumulative effects to fall chinook are insubstantial. Historic recreation use, combined with mining, forest practices, and agriculture, have demonstrated no cumulative effects to the historical fall chinook population or habitat.

Alternative B would have a beneficial effect.

Alternative C

Fourteen fall chinook spawning areas would be designated. No motorized use would be allowed in these areas when fall chinook are present. Nonmotorized watercraft would be required to pass around spawning areas or pass through in the deep part of the channel. This designation would have a beneficial effect on fisheries. Nonmotorized watercraft would not be allowed to stop in spawning areas if the spawning areas extend across the river. Private motorized boating and commercial motorized angling would be restricted to May 1 through September 15 in the Applegate Reach. Motorized tour boats would be allowed to operate from May 1 to September 15, but that season may be extended to September 30, if monitoring indicates no fall chinook spawning is occurring. No special boating events would be allowed. Nonmotorized use would be allowed year-round, but limits would be set on use levels.

Direct or indirect effects from anglers are negligible for fall chinook survival and production of adults, eggs, or fry. Intensity and duration of incremental effects to fisheries is expected to be the same as Alternative B. Cumulative effects to fisheries within the HRA are the same as Alternative B. Historic recreation use, combined with mining, forest practices, and agriculture, have demonstrated no cumulative effects to the historical fall chinook population of adults, eggs, or fry. Intensity and duration of incremental effects to fisheries is expected to be the same as Alternative B. Cumulative effects to fisheries within the HRA would be the same as Alternative B. Historic recreation use, combined with mining, forest practices, and agriculture, have demonstrated no cumulative effects to the historical fall chinook population or habitat. Overall, the fall chinook population has been stable in the past, notwithstanding the increase in recreation activity.

Alternative C would have a beneficial effect.

Alternative D

Under Alternative D, private motorized boating and nonmotorized floating and angling would be allowed year-round with no limits. Five special boating events would be allowed and new events would be considered. The motorized tour boat and commercial motorized angling seasons would be from April 1 to October 31.

Intensity and duration of effects would be expected to be higher than Alternative B because of the increase in the number of MTB trips and the extended MTB use season past September 30. The MTB season of use extends into the critical spawning and egg incubation period for fall chinook. There would be a 26 percent increase in MTB activity during the critical time of fall chinook spawning, which translates to a very high potential for mortality to the fall chinook run. Cumulative effects to fisheries from MTBs would be expected to be significantly higher than Alternative B. Angler effects would be the same as Alternative B. Alternative D specifies no motorized use in the four designated fall chinook spawning areas, which would provide protection for the redds and benefit fisheries.

Increased MTB use would not have a beneficial effect on juvenile salmonids (notwithstanding past research results of MTB effect on juveniles) if operations were different from the 1991 levels. Additional research may be required, especially if motorized boating increases substantially or if the period of operation changes.

Direct or indirect effects from anglers would be negligible for survival and production of fall chinook adults, eggs, or fry. Intensity and duration of effects to fisheries is expected to be short and incidental. Historic recreation use, combined with mining, forest practices, and agriculture, have demonstrated no cumulative effects to the historical fall chinook population or habitat.

Anadromous fish travel through the Eisman Stillwater, located immediately upstream of the Hellgate Recreation Area. This area is of special concern because it is one of the major fall chinook spawning areas in the mainstem Rogue River. All MTB activity passes through this area before entering the HRA. There would not be a beneficial effect on the mainstem Rogue River fall chinook population if MTBs operate past September 30. Under Alternative D, cumulative effects to fisheries within the HRA could be significant. Continual long-term effects could decrease the fall chinook population in the mainstem Rogue River.

Alternative D would not have a beneficial effect.

Alternative E - Proposed Action

Under the Proposed Action, fourteen fall chinook spawning areas would be designated. Private motorized boating and nonmotorized floating and angling would be allowed year-round, but use

would be limited in the future, if use limits are reached. Commercial motorized angling would be limited in the Applegate Reach to a season from December 1 to September 30, if monitoring indicates no fall chinook spawning is occurring. Two special boating events would be authorized and new events would be considered on a case-by-case basis, pending NEPA analysis. Motorized tour boats would be limited to a season of use from May 1 to September 30. MTB activity would be halted earlier if monitoring indicates fall chinook spawning is occurring. The MTB permittee would receive three days notice prior to halting MTB activity.

Direct or indirect effects from anglers would be negligible for fall chinook survival and production of adults, eggs, or fry. Intensity and duration of incremental effects to fisheries is expected to be the same as Alternative B. Cumulative effects to fisheries within the HRA would be the same as Alternative B. Historic recreation use, combined with mining, forest practices, and agriculture, have demonstrated no cumulative effects to the historical fall chinook population or habitat. Overall, the fall chinook population has been stable in the past, notwithstanding the increase in recreation activity.

Alternative E provides a beneficial effect to fisheries through the designation of the fall chinook spawning areas. Although motorized use would not be prohibited in those areas, it would be discouraged. Alternative E would also provide beneficial impacts by limiting the MTB use period.

The Proposed Action would have a beneficial effect.

Effects on Wildlife

Introduction

Studies have not been conducted to document the impacts of recreation on wildlife in the Hellgate Recreation Area. Therefore, the following discussion of potential impacts is primarily based on literature reviews of studies conducted for similar conditions.

Recreation has the potential to affect wildlife species inhabiting the Hellgate Recreation Area and its associated riparian and upland habitats. Response to disturbance varies among species of wildlife and even among individuals of the same species. Wildlife can tolerate a certain number of disturbances per unit time, but that tolerance has limits. Tolerance levels vary by species, time of year, habitat, and other factors (Knight and Gutzwiller 1995). Tolerance levels have not been determined for wildlife species in the Hellgate Recreation Area. Data for historical populations of wildlife and disturbance effects caused by recreation on the Hellgate Recreation Area are incomplete or unavailable (40 CFR 1502.22).

Human activities can affect wildlife in four primary ways: exploitation, disturbance, habitat modification, and pollution (Knight and Gutzwiller 1995). Exploitation and disturbance are direct effects. Habitat modification and pollution are indirect effects.

Direct impacts associated with exploitation include immediate death from hunting, trapping, or collection. Direct impacts can also result from the disturbance associated with activities, such as photographing wildlife, bird watching, hiking, camping, boating, swimming, and shore activities. Immediate responses to disturbance include death, behavioral changes (such as displacement, nest abandonment, reduced productivity, increased predation, and change in food habits), or physiological changes (such as elevated heart rates due to flight).

Wildlife are indirectly affected when their habitats are contaminated with discarded human food or foreign objects, such as tangled fishing line or plastic six-pack tops. Recreationists can modify vegetation, soil, water, and even microclimates, which in turn can impact the species dependent on these habitats. Even very light use on a site results in impacts to the soil and vegetation. Sites that are used on a regular basis will have areas where all ground cover vegetation is removed (Shelby et al. 1987) (Shindler and Shelby 1993).

All alternatives would allow for continued recreation during the reproductive season and within close proximity to wildlife during foraging, reproductive, and rearing periods. As part of this FEIS, impacts associated with the development or improvement of facilities, including day-use areas, camping sites, trails, and boat ramps, will not be addressed in detail. Prior to their implementation, these activities will require site-specific NEPA analysis and a detailed summary of potential effects.

The following assumptions are made for analysis purposes and are common to all the alternatives:

- Because recreation activities are concentrated on or next to the water, displacement or disturbance of wildlife would be greatest on or immediately adjacent to the Rogue River.
- A given amount of recreational use in the riparian zone would have a greater ecological impact than the same amount of use on the surrounding landscape. This results because the riparian zone occupies a relatively small area, but receives disproportionately high use from wildlife and provides important benefits to the aquatic system (Shindler and Shelby 1987)
- Some wildlife species have adapted to the presence of humans, so effects would be minimal.
- Species with specialized food and shelter requirements are more vulnerable to disturbance than species with generalized requirements.
- With increasing visitor use, there could be a corresponding increase in displacement or disturbance of some wildlife species. There is a potential that increased human encounters and recreational use may result in the loss of some species or individuals within the corridor if disturbance exceeds tolerance levels. Loss is defined as emigration, avoidance, or mortality.
- The majority of river recreation typically occurs after dawn and before dusk. This reduces potential impacts to wildlife species whose activities are primarily associated with the early morning and twilight hours.
- Seasonally, visitor use days within the Hellgate Recreation Area vary dramatically. Under the current management, there are approximately 1,000 visitors per day to the Hellgate Recreation Area for the month of March. By July, a high of 20,000 plus visitors (including MTB passengers) and as many as 450 watercraft per day are estimated. This seasonal increase in visitors corresponds with the reproductive period for a number of species.

Effects Common to All Alternatives

Bald Eagles

The Hellgate Recreation Area provides foraging and nesting habitat for bald eagles. Summer and winter foraging occurs on gravel bars with slack water and large trees for perching. Large trees are also required for nesting. Bald eagles establish nesting territories during January and February, when recreational use is at its lowest level. Monitoring indicates that by May 1, bald eagles associated with the Hellgate Recreation Area have typically completed incubation. Recreational use continues to increase throughout the nesting season and reaches a peak in July and August, when the demand for food needed to support eaglets also reaches a peak.

Bald eagles forage from perch locations generally at the river's edge. These perch locations adjacent to the water are very susceptible to disturbance from passing boaters or hikers. Due to their rarity, size, and beauty, eagles draw the attention of recreationists who stop in front of or approach perched eagles for photo opportunities. This may result in flushing the birds from their perch. The more often this disturbance occurs, the greater the loss of foraging efficiency. This may contribute to lost productivity and reduced survival rates.

Many factors seem to explain flush response rate and flush distance. Some research indicates eagles flush more often when boats approach slowly or are loud, than when boats approach rapidly or are quiet. Slow-moving boats disrupt eagle feeding activity more than fast-moving boats. Eagles flush more often from perches than from nests. Pedestrians (hikers, anglers, hunters) disturb bald eagles more than any other group in 13 categories of human activity. Eagles are largely unaffected by fast-moving, land-based vehicles, but become increasingly agitated as vehicles slow to a stop. Time of day also seems to influence flush response. Eagles flush more often in response to human activities before 10:00 a.m.; therefore, human activities during early mornings are potentially more disturbing to foraging eagles (Knight and Gutzwiller 1995).

In the long-term, recreation can have negative effects on eagle populations through reductions in survival, especially during winter, or result in reduced reproductive success, if the effects are cumulative. In one study, winter feeding activity of eagles was significantly reduced for periods up to 30 minutes following disturbance from human activity. Humans temporarily displaced eagles from foraging areas and restricted the population to a smaller area; birds avoided the same feeding area for long periods following a disturbance.

In a study conducted on the Columbia River, an observer in a stationary boat documented responses of foraging eagles in high use foraging areas of the Columbia River. Eagles typically spent less time and made fewer foraging attempts during the disturbance period than during the non-disturbance period (McGarigal et al. 1991).

In another study conducted on the Gulkana River, breeding eagles were studied to document their response to camping. When humans camped near nests (<100 meter), adult eagles decreased the time they fed nestlings and themselves (-30 percent), preened (-53 percent), slept (-56 percent), and maintained nests (-50 percent), but increased the time they brooded nestlings (+14 percent). Additionally, research indicated that 92 percent of nesting failures occurred during the incubation stage (Steidl and Anthony 1996).

In the HRA, monitoring of nesting bald eagles during the 2000 and 2001 Memorial Day Boatnik races was conducted. Some behavior observed during the race time included: perching, foraging, feeding, preening, and brooding. Observations or responses to passing boats included vocalizations, movement away from the nest, flight, and adult birds turning to face the noise source. While adult eagles were observed to react to passing race boats, normal behavior quickly resumed after the boats had passed. It is likely that the brief duration of the passing boats (<10 minutes) helps minimize the potential impacts. In summary, results of this monitoring indicated that passing boats did not appear to place adult birds or nestlings at risk.

In summary, human activities in foraging areas and around nests may alter eagle behavior and affect their ability to acquire food and feed nestlings. It is important to recognize that recreation activities may temporarily disrupt an eagle's environment and behavior and result in short-term disturbances. In the long-term, repeated short-term disturbance may affect individual fitness through effects on survival and reproductive success. Any reduction in survival could cause a long-term reduction in the population (Knight and Gutzwiller 1995).

While it is accepted that recreation may result in modified behavior, it is also accepted that this does not preclude bald eagle use in the HRA. There is evidence that bald eagles can become

habituated to certain levels of disturbance. This tolerance may vary depending upon the type of disturbance, the individual, time of year, and time of day. Under all alternatives, bald eagles are expected to utilize the HRA for both nesting and foraging.

Spotted Owls

There are no known northern spotted owl nests within the 1/4-mile corridor. Unlike bald eagles, northern spotted owls are not strongly tied to river courses for the purpose of nesting or foraging. Their occurrence would be strictly associated with the presence of forests with suitable nesting and foraging habitat attributes. It is unlikely that any of the alternatives would impact the spotted owl or its habitat.

Marbled Murrelet

There are no known marbled murrelet nests within the 1/4-mile corridor and occupancy is doubtful. It is unlikely that any of the alternatives would impact the marbled murrelet or its habitat.

Peregrine Falcons

Although there are no known peregrine falcon nests within the HRA, it is probable they utilize the area for foraging. Similar to bald eagles, peregrine falcons are strongly tied to river courses for the purpose of foraging. However, they typically cover large areas for foraging and do not remain perched for extended periods of time. Based on this, it is unlikely that any of the alternatives would impact the peregrine or its habitat.

Osprey

Osprey nest in the tops of snags (or trees with dead tops) in close proximity to the Rogue River. For the osprey nests located adjacent to the river within the Hellgate Recreation Area, recreational activities occur during the reproductive period and in close proximity to the nesting activity. Disturbance has the potential to result in reduced foraging efficiency, fewer young being fledged, and fewer young surviving their first few weeks after they have fledged.

Considering that recreational use and osprey nest numbers along the Hellgate Recreation Area have increased correspondingly, it appears that disturbance from humans has not appreciably compromised habitat values for nesting osprey. In fact, it is likely that many of the osprey utilizing the Rogue River have habituated to certain levels of disturbance. In areas of high levels of human activities, nesting osprey habituated to a variety of nonthreatening activities (Knight and Gutzwiller 1995). Although all alternatives have the potential to effect osprey, it is anticipated that osprey would continue to utilize the HRA for both nesting and foraging.

Great Blue Herons

Breeding populations of great blue herons concentrate in small areas and are particularly vulnerable to disturbance. Because disturbance can result in lost recruitment to the population, nest disruption that occurs during the nesting season of the great blue heron is especially critical. Disturbance can result in changes to behavior, redistribution, population declines, and colony abandonment. When adult herons are flushed from their nests, they can cause egg breakage or push chicks out of the nest. Eggs and young are defenseless when adults are absent (Knight and Gutzwiller 1995).

Great blue herons typically lay from three to five eggs, which hatch at different times. As a result, the young vary in both age and size. If the adults are disturbed during foraging efforts, their efficiency can be greatly reduced and result in fewer prey items being brought to their nestlings. If

there is not adequate food for all of the nestlings, great blue heron young will kill their younger and weaker siblings, a practice called siblicide. The greater the number of disturbance encounters, the greater the likelihood of increased mortality of the young (Ehrlich et al. 1988).

Great blue heron adults frequently forage along the riverbank and depend on stealth to capture their prey. Like the adults, young great blue herons also feed along the river edges. Young great blue herons expend more energy than adults during their foraging efforts, but are only half as successful. For young birds, disturbance during this learning phase can lead to starvation (Ehrlich et al. 1988).

At the same time, some studies have shown that human activities pose no direct threat to colonial waterbirds and have little to no effect on the birds. Some research has concluded that many species of colonial birds, such as the great blue heron, should habituate to repetitive human activity, if the birds are able to distinguish whether the human intrusion presents an actual threat to them (Knight and Gutzwiller 1995). Great blue herons may be able to habituate to repeated, nonthreatening activities, such as anglers boating past a rookery. Unexpected disturbance, however, puts the herons to flight (Vos et al. 1985).

For the great blue heron rookeries located within the Hellgate Recreation Area, recreation activities occur during the reproductive period and in close proximity to the nesting activity. Mature cottonwood stands provide outstanding nesting opportunities for great blue herons. Recreation sites (picnic areas, campsites, trails) in or adjacent to stands of cottonwoods may reduce the value of those sites as existing or potential rookery sites.

Monitoring indicates rookery and active nest numbers are very dynamic within the HRA. It is not possible to say how much recreation activities have contributed to changed rookery locations or patterns of decreased nest numbers. It is likely that many of the great blue herons utilizing the Rogue River have habituated to certain levels of disturbance.

Developments and land-based recreation, including bank angling, are most likely to affect great blue heron reproductive success. Water-based recreation confined to the river channel is least likely to affect great blue herons.

Gallinaceous Birds

The occurrence of mountain quail within the HRA is a function of the availability of suitable brush fields for nesting and foraging. It is anticipated that the recreation use that occurs on the river would not appreciably affect the mountain quail or its habitat. However, recreation sites (picnic areas, campsites, trails) in or adjacent to suitable brush fields may reduce the value of those sites as existing or potential nesting and foraging areas.

Neotropical Birds

Research regarding impacts to neotropical birds has primarily focused on changes in habitat. However, some research has focused on the impact of human visitors on neotropical birds.

In one study, changes in songbird behavior were documented after repeated interactions with humans. Red-winged blackbirds, goldfinches, and American robins became much more aggressive toward humans who repeatedly visited their nests (Knight and Gutzwiller 1995).

Nests placed in low growing vegetation are often within sight and reach of human visitors. People who are visiting nests may decrease nest or nestling survivorship, provoke nest abandonment, or discourage renesting. To make their nests less accessible to people, wildlife may alter nest placement based on prior experience with humans (Knight and Gutzwiller 1995).

Predators learn to follow human scent trails to nest sites. Avian predators apparently learn to forage in the vicinity of people who are visiting bird nests. Because songbirds often select nest sites in low growing vegetation, they are at an increased risk from predators such as raccoons.

In general, recreation has the potential to displace or attract some neotropical birds while leaving others unaffected. Some species are attracted to the deliberate or unintentional food sources left by recreationists. Other species are less likely to adapt to the presence of humans and may relocate to sites where there is less interaction with recreationists.

Indirect impacts resulting from recreation may be associated with changes in vegetation. Recreational use has the potential to compact and remove vegetation in some areas. Trails and other heavy use areas may experience changes in vegetation and habitat suitability for neotropical birds.

In summary, land based recreation has the greatest potential for impacting neotropical birds through both direct and indirect impacts. The number of visits and duration of visits largely influences the potential impacts to neotropical migrants.

Reptiles and Amphibians

Western pond turtle mortality can be attributed to a variety of causes. Mortality associated with recreation includes: roads and vehicle traffic, poaching, collection, habitat modification, and trampling of nests.

The western pond turtle is an extremely wary species and usually leaves basking sites as soon as disturbance is detected. Western pond turtles can be affected by all forms of watercraft. Observations in Oregon in 1991, indicate that high levels of boat/raft traffic in areas such as the Rogue River may potentially alter thermoregulatory patterns and behavior and possibly the distribution of certain types of micro habitat, particularly that utilized by hatchlings and juveniles (Holland 1993). Additionally, motorized boats have the potential for creating wakes that may disrupt western pond turtles basking in more exposed areas of the river. Turtles that become acclimated to the presence of boat or vehicular traffic may run an increased risk of mortality through shooting. Incidental observations during a study in Washington indicate that flight distances of turtles in watercourses in view of low to moderate levels of vehicular traffic often are significantly less than turtles in undisturbed areas (Holland 1991).

Within the Hellgate Recreation Area, the greatest potential for northern sagebrush lizard habitat loss is related to the exclusion of fire. The suitability of habitat for the northern sagebrush lizard is not likely to be compromised by current and projected recreation levels.

Yellow-legged tadpoles and frogs typically live in pools connected to the main channel of the river. Modification of streams and pools has the potential to impact yellow-legged frog habitat. Roads or trails that increase access to these sites could compromise their suitability as habitat for yellow-legged frogs. Any activities that disturb stream habitat and suitable pools have the potential to compromise habitat for yellow-legged frogs. Because tadpoles and frogs live in pools connected to the main channel of the river, they are vulnerable to disturbance or collection from people recreating adjacent to the river.

Because it is talus and not riparian corridors that fulfills Del Norte salamander life requisites, their occurrence within the HRA is directly tied to the presence of talus. Where suitable Del Norte salamander habitat occurs, it may be compromised by recreation activities. Trails and roads in areas of talus and suitable habitat create the potential for some habitat to be lost or impacted. Because Del Norte salamanders remain underground during dry weather, they are not likely to be subjected to disturbance or collection during the arid summer months when recreation use along the river is at a peak.

Mammals

Bat mortality can be attributed to a variety of causes. Mortality associated with recreation includes: poaching, habitat modification, and disturbance created by recreation in mine or cave sites. It is unlikely that boating, fishing, or recreation activities associated with the river would impact bat populations. However, trails or roads that would increase accessibility to roosting sites would impact bat populations.

Other Species

Although goshawk have been observed within the Hellgate Recreation Area, no nests have been located. Goshawk are a secretive species and, during the nesting season, they are particularly sensitive to human disturbance. Trails or roads that would promote increased visitation or disturbance at nest sites could result in abandonment of nests. Recreation near suitable nesting and foraging habitat could result in impacts to goshawk and their habitat.

For woodpeckers, recreation can result in impacts such as nest abandonment, increased predation, displacement, and loss of suitable habitat attributes. Predators, such as raccoons and opossums, are frequently attracted to areas where human visitation occurs.

In summary, woodpeckers and goshawks and their habitat could be impacted by recreation activities.

Alternative A

Alternative A is characterized by fewer watercraft and less visitor use. Fewer MTBs would be allowed in this alternative, but there would be more potential for disturbance to bald eagles. Due to the flexible start and end times, early morning and evening foraging may be affected. Since MTB trips would not be required to travel in groups and no minimum separation time between boats would be set, the potential for an increase in the duration of a disturbance would be possible. Although the specific threshold at which disturbance results in wildlife losses has not been determined for the HRA, the impacts to wildlife from MTBs are expected to be low.

Special boating events would be limited to the two events allowed under current conditions. Potential impacts to wildlife may result from both the boats and the spectators. While spectators often gather at boat landings, overlooks, campgrounds, and dispersed recreation sites, they may also congregate at wildlife sites that are not typically used for recreation. Disturbances to wildlife are expected to be moderate to low and not differ much from those that occur now.

Boating activities that occur year-round have the potential for disturbing wildlife during critical reproductive periods and winter foraging. The majority of watercraft use occurs after Memorial Day and this reduces the potential impacts to reproductive success for a wide range of species, including incubating bald eagles. Nonmotorized and motorized boating would be allowed year-round, however, limits to the amount of use would be set. Quantifying the actual impacts associated with disturbance is not possible, since the specific threshold at which disturbance results in wildlife losses has not been determined for the HRA. Impacts are expected to be low due to the decrease in watercraft and visitor use in this alternative.

There would be little to no effect under Alternative A.

Alternative B - No Action

Alternative B represents the continuation of current management. Only motorized tour boats would have limits on the number of trips, season of use, and hours of operation. Commercial motorized boat angling would be limited by the number of trips and the season of use. Other uses would be allowed to grow. The potential for increased disturbance to wildlife would increase as use increases. A low level of potential disturbance would be expected from motorized tour boats, since the trips would be regulated. Nonmotorized watercraft and other motorized uses would be allowed to increase with no limits. This could result in a moderate level of impact to bald eagles, western pond turtles, and yellow-legged frogs due to increased recreation use levels.

There would be little to no effect under Alternative B.

Alternative C

Alternative C represents more watercraft and visitor use than occurs today. The number of motorized tour boat trips per day would be less than Alternative B and a separation time between boats would be set. Fewer boat passes would produce fewer potential disturbances. Requiring the boats to travel in groups would decrease the duration of the disturbance. The daily use window for MTBs under Alternative C would minimize impacts to wildlife that forage during the early morning and evening hours. Nonmotorized boating would occur year-round and limits would be set in the future as use limits are reached. Use would increase over current levels, so potential disturbances to wildlife would also increase. Anticipated levels of impacts from nonmotorized boating would be low for most wildlife species. Motorized boating would be limited as use levels are reached. The season of use would be restricted in the Applegate Reach, but year-round in the Dunn Reach. Impacts to wildlife would increase until motorized boat use limits are reached, but would generally remain low. No special boating events would be allowed, so the potential impacts to wildlife would decrease from current levels.

There would be little to no effect under Alternative C.

Alternative D

Alternative D depicts the maximum amount of watercraft and visitor use under any alternative. The season of use, number of trips, and daily use window for MTBs would be expanded above present levels. This alternative represents the most potential for disturbance to many wildlife species. An increased number of boat passes produces more potential for disturbances. Expanding the season of use would cause MTBs to be present during the incubation period for bald eagles. Extending the daily use window to daylight hours would increase the disturbance of the wildlife that forage during the early morning and evening hours. However, motorized tour boat use occurs against a backdrop of continuing recreational use, including private motorized boating, nonmotorized boating, angling, hiking, camping, and picnicking. Increases in the number of motorized tour boats becomes less meaningful in the context of such a wide range of unregulated recreational uses.

Nonmotorized and motorized boating would have no limits and would take place year-round. Boating activities that take place year-round have the potential for disturbing wildlife during critical reproductive periods and winter foraging. This is particularly important for bald eagles, since recreation has been documented to affect foraging and nesting behavior. Motorized boating would have a moderate potential for impact to bald eagles and a low level for other wildlife species. Nonmotorized boating would produce a moderate level of impact to bald eagles, yellow-legged frogs, western pond turtles, and neotropical birds. Impacts would remain low for other wildlife species. The number of special boating events would be allowed to increase from two to

five events. These events could occur year-round. Impacts to bald eagles from the increased number of watercraft and spectators would increase, but would be moderate.

Alternative D would not have a beneficial effect.

Alternative E - Proposed Action

Alternative E represents the BLM's Proposed Action. The season of use for MTBs would remain the same. The number of trips in the Applegate Reach would be the same, but the number of trips in the Dunn Reach would decrease. Because fewer boat passes would occur, there would be fewer potential disturbances to wildlife. Impacts from MTBs would have a low level of significance.

Nonmotorized and motorized boating would take place year-round and levels would be restricted, if use limits are reached. Because boating could increase above present levels, the potential for disturbance would also increase. However, the consequences of those disturbances would be low. Special boating events would remain at current levels, except new events would be considered pending NEPA analysis.

As recreation use levels increase, the potential for disturbance to wildlife would also increase. The importance of those disturbances would be low for most wildlife species, with the exception of the bald eagle. For threatened and endangered species listed under the ESA, potential effects were analyzed in a Biological Assessment submitted to the USFWS in November of 2002. The effects determination for the bald eagle is *May Affect, Likely to Adversely Affect* (FWS ref. #1-15-02-F-112). For the spotted owl and the marbled murrelet, the effects determination is *No Effect*.

Effects on Motorized Boaters

Private Motorized Boaters

Introduction

Private motorized boaters use the entire Hellgate Recreation Area, but most use occurs in the Applegate Reach. The Applegate Reach is more attractive to private motorized boaters because of fewer encounters with other craft, easier navigation, and preferred fishing areas. Private motorized boaters represent less than 2 percent of the total number of watercraft in the HRA (Austermuehle 1995).

Effects on private motorized boaters may occur as a direct or indirect result of the levels of use for all watercraft, permit requirements, user fees, and level of encounters. These effects will be analyzed in relation to loss of opportunity and perceived crowding.

Setting use limits, requiring permits, or assessing user fees to all or a portion of all watercraft may increase displacement and reduce crowding.

Any reduction in crowding can be considered beneficial.

Effects Common to All Alternatives

Even though a special boating event may deny private motorized boaters use of the river, the overall effect would be beneficial because these users are major supporters and spectators of the events.

There are indirect beneficial effects to private motorized boaters from developed camp and day-use areas, which provide additional recreation opportunities. Float-in primitive campsites along the river provide a direct beneficial effect to the private motorized boater, since these sites are managed for all watercraft users.

The development or improvement of trails has little or no effect on private motorized boaters.

Visitor services provide an indirect beneficial effect to the private motorized boater by meeting the user's informational or educational needs.

Improvements or additions to boat ramps would have little effect on motorized boaters.

Alternative A

Use limits would be established for all watercraft including private motorized boating, motorized tour boating, nonmotorized boating, nonmotorized boat angling, and commercial motorized angling. Permits and fees would be required for all watercraft and would not be a beneficial effect.

Commercial motorized angling would be limited to 1 permit allowing 2 trips per day during the 153-day season of use. This would be a 50 percent reduction in the number of trips allowed. MTB use would decrease by 37 percent to 1,836 trips per year. By limiting use of all watercraft and requiring permits and a user fee, this alternative would have the greatest reduction in encounters and crowding, providing a beneficial effect for private motorized boaters. However, because of the level of regulation, this alternative would also have the greatest potential decrease in opportunity and would not be a beneficial effect.

Alternative A would not have a beneficial effect.

Alternative B - No Action

No new limits to permits, fees, and use would be imposed. The daily use level for nonmotorized watercraft and private motorized boating would be unlimited. With no limits, use levels could increase. This could increase opportunities and encounters. Increased opportunities would have a beneficial impact. Increased encounters, at some point, would not have a beneficial effect.

Commercial motorized angling would be limited to three permits, each allowed two trips per day. The season of use would allow 153 days of use (1,467 trips per year). MTB use would remain the same, 153 days of use for a total of 2,907 trips per year. An increase in these uses above current use levels would not have a beneficial effect on private motorized boaters.

There would be little to no effect under Alternative B.

Alternative C

The number of private motorized boating trips would not be limited under this alternative, unless use limits are reached. Private motorized boating would be allowed from May 1 to September 15 in the Applegate Reach (138-day season) and year-round in the Dunn Reach, except for July and August when use is limited to 4 days on the river and 10 days off. This is a reduction of 58 percent in the Applegate Reach and 11 percent in the Dunn Reach. Use may be further limited in the future, which would not be a beneficial effect.

This alternative limits MTBs to 1,656 trips per year. This would be a reduction of 43 percent, which would be a beneficial effect for private motorized boaters.

Fewer MTB encounters, a shorter commercial motorized angling season, limited nonmotorized watercraft, and limits on private motorized boating would reduce crowding, decreasing the possible number of encounters. This could provide a beneficial effect on private motorized boaters seeking solitude. However, this alternative would also not be beneficial, because the private motorized boater use is limited in the Dunn Reach.

There would be little to no effect under Alternative C.

Alternative D

Private motorized boating would occur year-round with no limits. Since this is the same as Alternative B, there would be no additional effects to private motorized boating.

This alternative allows motorized tour boats to run up to 5,564 trips per year, a 91 percent increase, which would not be a beneficial effect.

The daily use level for nonmotorized watercraft would be unlimited, the same as currently allowed. Commercial motorized angling could increase by 1,998 percent, which would not be a beneficial effect.

This alternative would increase all uses. Crowding and encounters would not be beneficial for the private motorized boater and could increase displacement. Any increase in displacement would not be beneficial to the private motorized boater. Alternative D allows growth in all uses, increasing crowding and encounters.

Alternative D would not have a beneficial effect.

Alternative E - Proposed Action

Under the Proposed Action, MTBs would continue at 2,907 trips per year. MTBs would be excluded from the Dunn Reach after noon on July and August weekends and holidays. Private motorized boaters would have fewer encounters with MTBs in the Dunn Reach during those times.

Commercial motorized angling would be limited to three permits, with no additional permits allowed. Commercial motorized angling would increase by 197 percent in the Applegate Reach, and 167 percent in the Dunn Reach. Encounters with the commercial motorized boats would have little or no effect on the private motorized boater.

Possible future limits on river use would decrease opportunities for all users, including private motorized boaters, which would not be a benefit. Limits on river use would also decrease encounters with other boats, which would be beneficial to private motorized boaters.

There would be little to no effect under the Proposed Action.

Commercial Motorized Anglers

Introduction

Commercial motorized anglers use the entire Hellgate Recreation Area, but most use occurs in the Applegate Reach. The Applegate Reach is more attractive to commercial motorized anglers because of fewer encounters with other craft, easier navigation, and more preferred fishing areas.

Angling is seasonal and dependent on fish runs. Motorized boat angling accounted for only 2 percent of the commercial use in the entire HRA (Austermuehle 1995).

Effects on commercial motorized anglers may occur as a direct or indirect result of the levels of use for all watercraft, permit requirements, user fees, level of encounters, and the number of access points. These effects will be analyzed in the context of potential displacement of commercial motorized anglers to other areas or rivers and perceived crowding.

Setting use limits, requiring permits, or assessing user fees to all or a portion of all watercraft would increase displacement and reduce crowding.

Any reduction in crowding can be considered a beneficial effect.

Effects Common to All Alternatives

There are indirect beneficial effects to commercial motorized boaters from developed camping sites and developed day-use sites, which provide additional recreation opportunities. Float-in primitive campsites along the river provide a direct beneficial effect to the commercial motorized angler since these sites are managed for all watercraft users.

The development or improvement of trails would have little or no effect on commercial motorized anglers.

Visitor services provide an indirect beneficial effect to the commercial motorized angler by meeting the user's informational or educational needs.

Improvements or additions to boat ramps and the number of vehicle access points on gravel bars would not affect the commercial motorized angler.

Alternative A

Commercial motorized angling would be limited to 306 trips per year, a 50 percent reduction. This would not be a beneficial effect on commercial motorized angling.

Use limits would be established for all watercraft, including motorized tour boats, nonmotorized watercraft, nonmotorized boat anglers, commercial motorized anglers, and private motorized boaters. Permits and fees would be required for all watercraft.

By restricting use of all watercraft, and requiring permits and a user fee, this alternative would have the greatest reduction in encounters and crowding. However, because of the level of regulation, this alternative would also have the greatest potential increase in displacement, which would not be a beneficial effect.

Two special boating events would be allowed. This would be no change from the current numbers and would cause no additional effects.

No erosion sensitive areas, fall chinook spawning areas, or additional no-wake zones would be designated. Because there would be no change from Alternative B, there would be no additional effects on commercial motorized anglers.

Alternative A would not have a beneficial effect.

Alternative B - No Action

Commercial motorized angling would be limited to 614 trips per year. MTB use would remain the same, 2,907 trips per year. Limits to commercial motorized angling and MTB use would not change, so there would be no additional effects to commercial motorized angling. No additional limits to permits, fees, and use would be imposed over current conditions. The daily use levels for nonmotorized boating and private motorized boating would be unlimited. With no limits, use levels would increase above current levels, increasing encounters and crowding. This would not be a beneficial effect on commercial motorized angling.

Two special boating events would be allowed and new events would be considered on a case-by-case basis. The addition of any new event would have a short-term impact on commercial motorized anglers during the event period.

No erosion sensitive areas, fall chinook spawning areas, or additional no-wake zones would be designated. Because there would be no change from Alternative B, there would be no additional effects on commercial motorized anglers.

Alternative B would not have a beneficial effect.

Alternative C

Commercial motorized angling would be limited to 828 trips per year, a 35 percent increase. This would have a positive impact on commercial motorized anglers. This alternative limits MTBs to 1,656 trips per year, a 43 percent decrease. The daily use window would decrease by 571 hours per season, a 33 percent reduction in the hours of operation. The reductions in MTB trips and hours would reduce encounters and would have a beneficial effect on commercial motorized anglers.

The daily use level for nonmotorized watercraft would be limited in the future, if use limits are reached. Private motorized boating would occur May 1 to September 15 in the Applegate Reach and year-round in the Dunn Reach, except for July and August, when use would be limited to 4 days on the river and 10 days off. This would be a reduction of 58 percent in the Applegate Reach and 11 percent in the Dunn Reach. These reductions would have a beneficial effect.

No special boating events would be allowed in the Hellgate Recreation Area, a reduction from current conditions. This would be a beneficial effect.

Increased commercial motorized angling trips, fewer MTB encounters, and limits on nonmotorized and private motorized boating would increase opportunities, reduce crowding, and decrease the possible number of encounters, which would be a beneficial effect for commercial motorized anglers.

Four erosion sensitive areas, fourteen fall chinook spawning areas, and five new no-wake zones would be designated. This would not be a beneficial effect for commercial motorized anglers because of some restrictions in where they would be allowed to fish or anchor.

Alternative C would have a beneficial effect.

Alternative D

Commercial motorized angling would be allowed 12,840 trips per year, a 1,998 percent increase in opportunities. This increase would be a beneficial effect for commercial motorized anglers.

Motorized tour boats would be allowed 5,564 trips per year, a 74 percent increase. The season of use would increase by 61 days and MTBs would be allowed to take trips at any time during daylight hours. The increase in MTB trips, season of use, and hours of operation would increase encounters and would not be a beneficial effect for commercial motorized anglers.

The use levels for nonmotorized and private motorized boating would be unlimited, the same as Alternative B. This would result in no change in current conditions and would cause no additional impacts.

Five special boating events would be allowed and new events would be considered on a case-by-case basis. This increase could cause a short-term impact to commercial motorized anglers during the events.

Two erosion sensitive areas, four fall chinook spawning areas, and five additional no-wake zones would be designated. These designations would impose restrictions on motorized boat operations and fishing locations. Restrictions on commercial motorized anglers would not be a beneficial effect.

This alternative would increase all uses, which would increase crowding and the possible number of encounters. This would not be a beneficial effect for the commercial motorized angler.

Alternative D would not have a beneficial effect.

Alternative E - Proposed Action

Under the Proposed Action, commercial motorized angling would be limited to three permits. Restrictions would limit access in both reaches. In the Applegate Reach, use would be restricted to December 1 through September 30 (304 days). Use would be halted prior to September 30, if monitoring indicated fall chinook spawning was occurring. The number of trips per year in the Applegate Reach would increase to 1,824, a 300 percent increase. Access in the Dunn Reach would be limited to September 1 through May 31 (274 days). The number of trips per year in the Dunn Reach would increase to 1,638, a 268 percent increase. These increases in the season of use from the current 153-day season in both reaches would be a beneficial effect for commercial motorized anglers.

MTBs would remain at 2,907 trips per year, however, commercial motorized anglers would have fewer encounters with MTBs in the Dunn Reach. Fewer encounters would reduce crowding and would be a beneficial effect.

Two special boating events would be allowed and new events would be considered on a case-by-case basis. The addition of any new event would not have a beneficial effect on commercial motorized anglers during the event.

Four erosion sensitive areas, four fall chinook spawning areas, and one additional no-wake zone would be designated. Since commercial motorized angling would not be allowed when fall chinook are spawning, the fall chinook spawning areas would have no impact on these users. The erosion sensitive areas and no-wake zones would not be a beneficial effect because of some restrictions in boat operations.

Private motorized boating, nonmotorized floating, and nonmotorized boat angling would not be limited, unless use limits are reached. These uses could increase above current levels, which would increase crowding and the possible number of encounters. This would not be a beneficial effect for the commercial motorized angler.

The Proposed Action would have a beneficial effect.

Commercial Motorized Tour Boat Passengers

Introduction

Visitor-caused impacts in the Hellgate Recreation Area have not deterred motorized boaters from enjoying their activities. Most motorized boaters (86 percent) rated their experience as excellent or perfect. Increased visitor use levels of all types have had little effect on user satisfaction. Rather than become discouraged, motorized boaters tend to adjust their view of the higher density situation and remain satisfied (Shindler and Shelby 1993).

Because of the high level of trip satisfaction for MTB passengers, the main issue for them is whether there is room for them on a tour boat. The analysis of impacts for motorized tour boat passengers will focus on the number of passengers allowed per year.

All alternatives will allow some level of motorized tour boat use.

Table 4-1 summarizes the limits that would be placed on motorized tour boat trips in the Applegate and Dunn reaches. The Dunn Reach trips are part of the Applegate allocation.

Effects Common to All Alternatives

The presence or absence of other recreation opportunities, developments, visitor services, and law enforcement would not affect motorized tour boat passengers.

NOTE: In the following analyses, the first number of passenger spaces is based on current use. The second number, in parenthesis, is based on the maximum number of passenger spaces that could be used, taking into consideration the number of trips per day and the season of use allowed.

Alternative A

Alternative A limits motorized tour boats to 12 trips per day in the Applegate Reach and 8 trips per day in the Dunn Reach, except on holidays and weekends in July and August, when it would be 4 in the Dunn Reach. The season of use would be May 1 to September 30. One boat up to 43' by 14' would be allowed. All other boats would be 36' by 12' 6" or less.

The maximum number of passengers that could take an MTB trip in Alternative A would be 67,771 (100,980). This would be a decrease of 9,696 (70,533) passengers per year. The long-term effect over 10 years would be a loss of 96,960 (705,330) passenger spaces. These numbers represent a 13 percent (41 percent) reduction in passenger space, which would not be a beneficial effect for prospective MTB passengers.

Alternative A would not have a beneficial effect.

Alternative B - No Action

Alternative B limits MTBs to 19 trips per day in the Applegate Reach and 19 trips per day in the Dunn Reach, except on weekends and holidays in July and August, when it would be 6 in the Dunn Reach. The season of use would be May 1 to September 30. The number of passenger spaces used

under this alternative would be 76,500. The maximum number of spaces available would be 171,500. Two boats up to 43' by 14' would be allowed. All other boats would be 36' by 12' 6" or less.

There would be no change from current conditions, so no change in effects would occur.

There would be little to no effect under Alternative B.

Alternative C

Alternative C limits motorized tour boats to 12 trips per day in the Applegate Reach and 8 trips per day in the Dunn Reach, except on holidays and weekends in July and August, when it would be 4 in the Dunn Reach. The season of use would be May 1 to September 15, with an extension to September 30, if monitoring indicates no fall chinook spawning is occurring. All boats would be 36' by 12' 6" or less. The two larger boats would be removed from the fleet.

The maximum number of passengers that could take an MTB trip in Alternative C would be 58,034 (82,800) per year. This would be a decrease of 18,433 (88,713) passenger spaces. The long-term effect over ten years would be a loss of 184,330 (887,130) passenger spaces. These numbers represent a 24 percent (51 percent) reduction in passenger space, which would not be a beneficial effect for prospective MTB passengers.

Alternative C would not have a beneficial effect.

Alternative D

Alternative D limits motorized tour boats to 26 trips per day in the Applegate Reach and 16 trips per day in the Dunn Reach, except on holidays and weekends in July and August, when it is 8 in the Dunn Reach. The season of use would be April 1 to October 31. Boat sizes would remain the same as currently allowed.

The maximum possible number of passengers that could take an MTB trip in Alternative D would be 94,788 (328,267) per year. This would increase capacity from Alternative B by 18,321 (156,763) passengers. The long-term effect over 10 years would be a gain of 183,210 (1,567,630) passenger spaces. These numbers represent a 24 percent (91 percent) increase in passenger spaces, which would be a beneficial effect for prospective MTB passengers.

Alternative D would have a beneficial effect.

Alternative E - Proposed Action

Alternative E would limit motorized tour boats to 19 trips per day in the Applegate Reach and 8 trips per day in the Dunn Reach, except on holidays and weekends in July and August, when it would be 4 trips before noon in the Dunn Reach. The season of use would be May 1 to September 30. Trips would be halted earlier if monitoring indicates fall chinook spawning is occurring. One boat up to 43' by 14' would be allowed. All other boats would be 36' by 12' 6" or less.

The maximum number of passengers that could take an MTB trip in Alternative E would be 75,888 (145,350) per year. This would be a decrease in capacity from the Alternative B of 579 (26,163) passengers. The long-term effect over 10 years would be a loss of 5,790 (262,630) passenger spaces. These numbers represent a 1 percent (15 percent) reduction in passenger space, which would not be a beneficial effect for prospective MTB passengers.

There would be little to no effect under the Proposed Action.

Effects on Special Boating Event Participants and Spectators

Introduction

Special boating events within the Hellgate Recreation Area include the current Boatnik Memorial Day Boat Race and the Labor Day Boat Race. New events in the HRA could include motorized and nonmotorized events.

Special boating event participants and spectators desire access to the river for their event. The greater the access, the more desirable the alternative.

Effects Common to All Alternatives

Camping, day-use, and hiking areas would provide an indirect benefit to special boating event spectators by supplying additional recreation opportunities.

Alternative A

Two events, limited to two hours per day, would be allowed. Those events would be the Memorial Day Boatnik and Labor Day boat races. No new permits would be allowed. There would be no change from current conditions and no additional impacts would occur.

Alternative A would have a beneficial effect.

Alternative B

Two events, limited to two hours per day, would be allowed. Those events would be the Memorial Day Boatnik and Labor Day boat races. New permits would be issued. River closures for new events, if necessary, would be limited to a maximum of two hours per day. New events would provide additional opportunities and would be a beneficial effect for special boating event spectators or participants.

Alternative B would have a beneficial effect.

Alternative C

No special boating events would be allowed in the HRA. Since there would be no opportunities for spectators or participants, there would not be a beneficial effect for those users.

Alternative C would not have a beneficial effect.

Alternative D

Five events, including the two races permitted under Alternative B, would be allowed. The duration of the events would not be limited. New events would be considered on a case-by-case basis, pending NEPA analysis. This increase in opportunities would provide a beneficial effect for special boating event spectators and participants.

Alternative D would have a beneficial effect.

Alternative E - Proposed Action

Two events, limited to two hours per day, would be allowed. These two events would be the Memorial Day Boatnik and Labor Day boat races. New events would be considered on a case-by-case basis, pending NEPA analysis. River closures for new events, if necessary, would be limited to a maximum of two hours per day. This would be an increase over Alternative B and would be a beneficial effect for special boating event spectators and participants.

The Proposed Action would have a beneficial effect.

Effects on Nonmotorized Floaters

Introduction

Nonmotorized floating occurs in the entire Hellgate Recreation Area, but most use occurs in the Dunn Reach. In comparison to other activities, nonmotorized floaters account for the second highest visitor use levels, 26 percent of all use, and the highest number of watercraft, 77 percent of all watercraft, in the HRA (Austermuehle 1995).

Effects on nonmotorized floaters may occur as a direct or indirect result of the levels of use for all watercraft, permit or user fee requirements, level of encounters, and the number of access points. These effects will be analyzed in the context of potential displacement of users to other areas or rivers, perceived crowding, and the number of encounters.

Setting use limits, requiring permits, or assessing user fees to all or a portion of all watercraft may increase displacement and reduce crowding.

Effects Common to All Alternatives

Developed camp and day-use areas would provide indirect beneficial effects to nonmotorized floaters from the addition of recreation opportunities within the Hellgate Recreation Area. Float-in camp areas would be managed for all watercraft users and would provide a direct beneficial effect to the nonmotorized floaters.

The development or improvement of trails has little or no effect on nonmotorized floaters.

Visitor services provide an indirect beneficial effect to the nonmotorized floater by meeting the user's informational or educational needs.

The ten existing developed boat ramps will continue to be maintained for all users. Improvements or additions to existing boat ramps and construction of new boat ramps would benefit the nonmotorized floater by providing more opportunity to launch and easing crowding at the launch sites.

The number of vehicle access points on gravel bars would have no effect on floaters.

Any reduction in crowding would be considered a beneficial effect.

Alternative A

Under Alternative A, use limits would be established for all watercraft, including motorized tour boats, nonmotorized floaters, nonmotorized boat anglers, commercial motorized anglers, and private motorized boaters. Special Recreation Permits (SRPs) and SRP fees would be required for all commercial use. Permits and user fees would be required for all boaters. MTB use would be reduced by 37 percent to 1,836 trips per year. Commercial motorized angling would be allowed 306 trips per year, a 50 percent reduction. One existing boat ramp would be improved.

Two special boating events would be allowed. Since this is no change from current conditions, there would be no additional impacts.

By limiting use of all watercraft and requiring permits and a user fee, the resulting reduction in encounters and crowding would provide a beneficial effect. However, because of the level of regulation, this alternative would also increase displacement, which would not be a beneficial effect to the nonmotorized floater. Although the decrease in the number of boat ramps from the baseline would not be beneficial, this would be offset by the reduction in crowding that may result from the level of regulation proposed. The net result would be a beneficial effect to the nonmotorized floater.

Alternative A would have a beneficial effect.

Alternative B - No Action

Under Alternative B, motorized tour boat and commercial motorized angling use would be limited. Commercial motorized angling would be limited to a total of 614 trips per year. MTB use would be limited to a total of 2,907 trips per year. SRPs and SRP fees would be required for all commercial use. Nonmotorized watercraft and private motorized boating would not be limited and permits and user fees would not be required. With no limits, use could increase above current levels, causing an increase in the number of encounters and crowding. This would not be a beneficial effect to floaters. Two undeveloped boat access sites would be improved. This would disperse use and reduce crowding at boat launch sites, which would benefit floaters.

Two special boating events would be allowed and new events would be considered on a case-by-case basis, pending NEPA analysis. Any new event would have a short-term impact to floaters during the event.

There would be little to no effect under Alternative B.

Alternative C

This alternative limits MTBs to 1,656 trips per year. This would be a 43 percent reduction in the number of trips allowed and would be a beneficial effect. The season of use would be 138 days, a decrease of 15 days from baseline. Commercial motorized angling would be limited to 828 trips per year, a 35 percent increase.

SRPs and SRP fees would be required for all commercial use. Permits would be required for all watercraft users. A user fee would be required for boaters and the number of permits would be restricted, if use limits are reached.

The daily use level for nonmotorized watercraft would be restricted in the future, if use limits are reached. Private motorized boating would occur year-round in the Dunn Reach and May 1 to

September 15 in the Applegate Reach. Use would be restricted to 4 days on the river and 10 days off in the Dunn Reach in July and August. Numbers would be limited in the future, if use limits are reached. Although the use limits are not known, the restrictions in the Dunn Reach would decrease the encounters between motorized and nonmotorized use in the area where the majority of the nonmotorized use occurs. Three undeveloped boat access sites would be improved, dispersing use and reducing crowding at boat launch sites. This would be a beneficial effect for floaters.

No special boating events would be allowed in the Hellgate Recreation Area. This would be a reduction from current conditions and would be a beneficial effect.

Fewer MTB encounters, limits on nonmotorized watercraft, and limits on private motorized boating would reduce crowding and decrease the number of encounters, which would be a beneficial effect for the nonmotorized floater. However, because limits would be placed on nonmotorized floaters, this alternative would also not be beneficial to the nonmotorized floater.

Alternative C would have a beneficial effect.

Alternative D

Alternative D allows motorized tour boat use to increase to 5,564 trips per year, a 91 percent increase. This would be a major increase over the current use level and, therefore, would not be a beneficial effect. Commercial motorized angling would be allowed 12,840 trips per year, a 1,998 percent increase.

Special Recreation Permits and SRP fees would be required for all commercial use. Permits would be required for all watercraft and user fees would be required for all users. There would be no limit on the number of permits.

Three undeveloped boat access sites would be improved. Two new ramps would be constructed. New and improved boat access would disperse use and reduce crowding at boat launch sites, which would be a beneficial effect.

The daily use level for nonmotorized and private motorized watercraft would be unlimited, the same as currently allowed. Five special boating events would be allowed and new events would be considered on a case-by-case basis.

This alternative would allow increases in all uses. More crowding and encounters would not be a beneficial effect for the nonmotorized floater.

Alternative D would not have a beneficial effect.

Alternative E - Proposed Action

Under the Proposed Action, MTBs would be allowed 2,907 trips per year. Also, there would be no trips past noon in the Dunn Reach on weekends and holidays in July and August. Nonmotorized floaters would have fewer encounters with MTBs in the Dunn Reach, which is the primary reach used by nonmotorized floaters. Fewer encounters would reduce crowding and would be a beneficial effect.

Commercial motorized boat angling would be limited to 1,824 trips per year in the Applegate Reach and 1,638 trips per year in the Dunn Reach. In the Applegate Reach, it would be restricted to December 1 through September 30. Use would be halted if monitoring indicates fall chinook spawning is occurring in major areas. Use in the Dunn Reach would be limited to September 1

through May 31. Three undeveloped boat access sites would be improved. This would disperse use and reduce crowding at boat launch sites, which would have a beneficial effect on floaters.

SRPs and SRP fees would be required for all commercial use. User fees and permits would be required for all boaters, if use limits are reached. The number of permits would be restricted for all watercraft, if use limits are reached.

With no limits set for private motorized boating, nonmotorized floating, and nonmotorized angling, unless use limits are reached, this alternative has the potential to allow an increase in those uses. Crowding and encounters could impact the nonmotorized floater. Reductions in the number of trips allowed in the Dunn Reach by MTBs and commercial motorized angling boats would reduce crowding and encounters between motorized and nonmotorized use in the area of the river that receives the most floating use. This would be a beneficial effect on floaters.

Two special boating events would be allowed and new events would be considered on a case-by-case basis, pending NEPA analysis. This would be no change from current conditions and would provide no additional impacts.

The Proposed Action would have a beneficial effect.

Effects on Boat Anglers

Introduction

Boat angling occurs in the entire Hellgate Recreation Area. Boat angling is seasonal and dependent on fish runs. Four percent of the water-based visitor use is by boat anglers (Austermuehle 1995).

Effects on boat anglers may occur as a direct or indirect result of the levels of use for all watercraft, permit requirements or user fees, level of encounters, and the number of access points. These effects will be analyzed in the context of potential displacement of users to other areas or rivers and perceived crowding.

Setting use limits, requiring permits, or assessing user fees to all or a portion of all watercraft could increase displacement. Setting use limits would reduce crowding.

The ten existing developed boat ramps would continue to be maintained in all alternatives, providing no loss in boat launching opportunities. Any increase in the number of boat ramps or undeveloped access points along the river would potentially reduce crowding at launch sites.

Effects Common to All Alternatives

There are indirect beneficial effects to boat anglers from developed camp areas and day-use areas, which provide additional recreation opportunities. Float-in campsites along the river provide a direct beneficial effect to the boat angler by increasing recreation opportunities.

The development or improvement of trails would have little or no effect on boat anglers.

Visitor services provide indirect beneficial effects to boat anglers by meeting their informational or educational needs.

Alternative A

Nonmotorized boat angling would be limited to 30 boat trips per day. Use limits would be established for all watercraft, including motorized tour boats, nonmotorized watercraft, nonmotorized boat anglers, commercial motorized anglers, and private motorized boaters. SRPs and SRP fees would be required for all commercial use. Permits and user fees would be required for all watercraft and the number of permits would be restricted. MTB use would be reduced by 37 percent to 1,836 trips per year. Commercial motorized angling would be allowed 306 trips per year, a 50 percent reduction. No new boat access points would be developed.

In comparison to Alternative B, limiting use of all watercraft and requiring permits and user fees would reduce crowding and the number of encounters for all users. However, because of the level of regulation, this alternative would increase displacement of the boat angler because of limited access and use, which would not be a beneficial effect.

Two special boating events would be allowed. This would be the same as currently allowed, so there would be no additional effects.

One undeveloped boat access site would be improved. This would disperse use and reduce crowding at boat launch areas, which would be a beneficial effect.

No angling enhancement zones or fall chinook spawning areas would be designated, the same as current conditions. There would be no additional impact to nonmotorized boat angling.

Alternative A would not have a beneficial effect.

Alternative B - No Action

In the No Action Alternative, nonmotorized angling, nonmotorized floating, and private motorized boating would be unlimited. Motorized tour boats and commercial motorized angling would be limited in number of permits and trips allowed and the season of use. Special Recreation Permits and SRP fees would be required for all commercial use. Use levels could increase and would not have a beneficial effect on nonmotorized boat angling should encounters and crowding increase significantly.

Two special boating events would be allowed and new events would be considered on a case-by-case basis, pending NEPA analysis. Any events above current levels would have a short-term impact to boat anglers during the event.

Two undeveloped boat access sites would be improved. This would disperse use and reduce crowding at boat launch areas, which would be a beneficial effect.

No erosion sensitive areas, fall chinook zones, or additional no-wake zones would be designated. There would be no additional impacts.

There would be little to no effect under Alternative B.

Alternative C

In Alternative C, nonmotorized boat angling would be limited in the future, if use limits are reached. The daily use level for nonmotorized floating would be restricted to 500 boat trips per day.

This alternative limits MTB use to the lowest use levels of all the alternatives. MTBs would be limited to 1,656 trips per year, a 43 percent decrease. The reduction in the number of trips allowed would be a beneficial effect for boat anglers because of fewer encounters with the motorized boats.

Commercial motorized angling would increase to 828 trips per year, a 35 percent increase. The increase in motorized angling would also increase crowding and competition for fishing sites and would not be a beneficial effect for nonmotorized anglers.

Private motorized boating would be limited in the future, if use limits are reached. They would be allowed year-round in the Dunn Reach, but would be limited in the Applegate Reach. This would be a beneficial effect for the boat angler who uses the Applegate Reach. There would be fewer encounters and less crowding from private motorized boaters.

SRPs and SRP fees would be required for all commercial use. Permits and user fees would be required for all boaters and the number of permits would be restricted, if use limits are reached.

Fewer MTB encounters, limited nonmotorized watercraft, and limits on private motorized boating would decrease the possible number of encounters and reduce crowding, which would be a beneficial effect for boat anglers. However, restricted nonmotorized boat angling would limit recreation opportunities and would not be a beneficial effect.

No special boating events would be allowed. This would have a beneficial effect on boat anglers because there would be no limitations placed on them during the events.

Three undeveloped boat access sites would be improved. This would disperse use and reduce crowding at boat launch sites, which would be a beneficial effect.

Fourteen fall chinook spawning areas and eight angling enhancement zones would be designated. In Alternative C, watercraft would not be allowed to anchor or hold their position in these areas. This would not be a beneficial effect for nonmotorized boat anglers.

Alternative C would have a beneficial effect.

Alternative D

Nonmotorized boat angling and floating would remain unlimited, the same as currently allowed. There would be no beneficial effects as use levels increase. This alternative allows MTB trips to increase by 91 percent to 5,564 trips per year. Commercial motorized angling would increase by 1,998 percent to 12,840 trips per year. Increased encounters with MTBs and increased competition for fishing sites with commercial motorized anglers would not be a beneficial effect.

SRPs and SRP fees would be required for all commercial use. Permits and fees would be required for all boaters. There would be no restrictions on the number of permits.

Five special boating events would be allowed. New events would be considered on a case-by-case basis, pending NEPA analysis. These special boating events would have a short-term impact to boat anglers during the event.

Three undeveloped boat access sites would be improved and two new boat ramps would be constructed. This would disperse use and reduce crowding at boat launch areas, which would be a beneficial effect.

Angling enhancement areas and four fall chinook spawning areas would be designated. These areas would not be beneficial because of increased restrictions on boat anglers.

This alternative would increase all uses. Increased crowding and more encounters could cause boat anglers to shift use to another part of the Rogue or another river. This would not have a beneficial effect.

Alternative D would not have a beneficial effect.

Alternative E - Proposed Action

No limits would be set for nonmotorized floaters, nonmotorized boat anglers, and private motorized boaters, unless use limits are reached. Increased crowding and number of encounters would not be beneficial to boat anglers.

Under the Proposed Action, MTBs would be allowed 2,907 trips per year. However, fewer trips would occur in the Dunn Reach (8 trips per day compared to 19 in Alternative B). Also, there would be no trips past noon in the Dunn Reach on weekends and holidays in July and August. As a result, the number of encounters between nonmotorized boat anglers and MTBs would be reduced in the Dunn Reach, which would be a beneficial effect.

Commercial motorized angling would be limited to 1,824 trips per year in the Applegate Reach (198 percent increase) and 1,638 trips per year in the Dunn Reach (168 percent increase). In the Applegate Reach, the season of use would be December 1 through September 30. Use in the Dunn Reach would be limited to September 1 through May 31. Commercial motorized angling would be allowed an increase in trips, thereby increasing encounters and angling competition, which would not be a beneficial effect.

SRPs and SRP fees would be required for all commercial use. Permits and user fees would be required and the number of permits would be restricted, if use limits are reached.

Two special boating events would be allowed and new events would be considered on a case-by-case basis, pending NEPA analysis. Any increase over the two special boating events currently allowed would have a short-term impact on the boat angler.

Three undeveloped boat access sites would be improved. This would disperse use, reduce crowding at boat launch areas, and result in a beneficial effect.

Eight angling enhancement zones and 14 fall chinook spawning areas would be designated. The restrictions placed on boat anglers in these areas would not be a beneficial effect.

There would be little to no effect under the Proposed Action.

Effects on Bank Anglers

Introduction

Bank angling occurs throughout the Hellgate Recreation Area. Bank angling is seasonal and dependent on fish runs.

Effects on bank anglers may occur as a direct or indirect result of the levels of use for all watercraft, permit requirements or user fees, the level of encounters, and the number of access points.

These effects will be analyzed in the context of potential displacement of users to other areas or rivers and perceived crowding. Requiring permits and fees for watercraft would reduce use levels.

Effects Common to All Alternatives

There are indirect beneficial effects to bank anglers from developed camp and day-use areas, which provide additional recreation opportunities.

Visitor services provide an indirect beneficial effect to the boat anglers by meeting the user's informational or educational needs.

Improvements to boat ramps would not affect the bank angler.

Because of the potential for interference from watercraft, any decrease in numbers of watercraft would be beneficial to the bank angler.

Alternative A

Use limits would be established for all watercraft, including motorized tour boats, nonmotorized floaters, nonmotorized boat anglers, commercial motorized anglers, and private motorized boaters.

MTB use would be reduced by 37 percent to 1,836 trips per year. Commercial motorized angling would be allowed 306 trips per year, a 50 percent reduction. Both these reductions would have a beneficial effect on bank anglers.

Permits and user fees would be required for all boaters. The number of permits would be restricted. By limiting use of all watercraft and requiring permits and a user fee, this alternative would reduce crowding and the number of encounters between all watercraft users and bank anglers. This would be a beneficial effect for bank anglers.

No new fishing access sites would be developed and the two existing sites would not be maintained. This reduction in access would not have a beneficial effect on the bank angler.

Vehicle access on three gravel bars would be eliminated. This would reduce opportunity for bank anglers to easily access shoreline, which would not be a beneficial effect.

Two special boating events would be allowed and no new events would be considered. The number of events would remain at current levels, so there would be no additional impacts to bank anglers.

Alternative A would have a beneficial effect.

Alternative B - No Action

No new limits to permits, fees, and use would be imposed. Commercial nonmotorized floating and angling would not be limited, but SRPs and SRP fees would be required for commercial users. The daily use levels for nonmotorized and private motorized boating would be unlimited. With no limits, if use levels increase, the increase in the number of encounters would not have a beneficial effect on bank anglers.

MTB use would remain at 2,907 trips per year. Commercial motorized angling would be limited to 1,467 trips per year. Since use levels would not change, there would be no additional impacts to bank anglers.

Two new fishing access sites would be established. This would increase opportunities and ease crowding for the bank angler, which would be a beneficial effect.

Vehicle access on gravel bars would remain at five areas. This would provide no change from current conditions and would provide no additional impacts.

Two special boating events would be allowed and new events would be considered on a case-by-case basis, pending NEPA analysis. Any new events would have a short-term impact to the bank angler during the event.

Alternative B would have a beneficial effect.

Alternative C

Under Alternative C, MTBs would be limited to 1,665 trips per year, a 43 percent decrease. The daily use window would decrease by 33 percent. The reduction in the number of trips and the daily use window would allow bank anglers more fishing time without interference from MTBs and would have a beneficial effect on bank anglers.

Commercial motorized angling would increase to 828 trips per year, a 35 percent increase. The increase in motorized angling would also increase crowding and competition for fishing sites and would not be a beneficial effect to bank anglers.

Private motorized boaters would be limited to a 138-day season in the Applegate Reach and would be allowed year-round in the Dunn Reach, except for July and August when use would be limited to 4 days on the river and 10 days off. Use would be limited in the future if use limits are reached. These reductions would decrease encounters and crowding and would have a beneficial effect on the bank angler. The use levels for nonmotorized floaters and anglers would be restricted in the future. User fees and permits would be required for all boaters, if use limits are reached. Any limits to watercraft would be beneficial to the bank angler.

No special boating events would be allowed in the HRA. This would have a beneficial effect on the bank angler because no closures or limitations would be placed on them.

Three new fishing access sites would be established, increasing opportunities and easing crowding for the bank angler. This would be a beneficial effect.

Vehicle access would be provided on seven gravel bars, increasing access by two areas. This would increase opportunity for bank anglers to easily access shoreline, which would be a beneficial effect.

Alternative C would have a beneficial effect.

Alternative D

Under Alternative D, all uses would increase. Increased crowding and more encounters would not be a beneficial effect on bank anglers.

MTB use would increase by 91 percent to 5,564 trips per year, which would not be a beneficial effect. Commercial motorized angling would increase by 778 percent. Increased crowding, number of encounters, and competition for fishing sites would not be beneficial to the bank angler.

Five special boating events would be allowed for an unlimited number of hours per year. These special boating events would have a short-term impact to bank anglers during the event.

Three new fishing access sites and five new vehicle access areas would be established. These actions would ease shoreline crowding and increase opportunity for bank anglers to easily access the shoreline, which would be a beneficial effect.

Alternative D would not have a beneficial effect.

Alternative E - Proposed Action

Under the Proposed Action, MTBs would remain at 2,907 trips per year, although there would be a reduction in the number of trips in the Dunn Reach. Fewer encounters with the motorized boats would have a beneficial effect on bank anglers.

Commercial motorized boat angling would be limited to 1,824 trips per year in the Applegate Reach (198 percent increase) and 1,638 trips per year in the Dunn Reach (168 percent increase). In the Applegate Reach, it would be restricted to December 1 through September 30. Use in the Dunn Reach would be limited to September 1 through May 31. The increase in trips would increase encounters and angling competition, which would not be a beneficial effect.

There would be no limits set for private motorized boating, floaters, and nonmotorized boat anglers, unless use limits are reached. Increased crowding and more encounters have the potential to displace bank anglers if use levels climb too high, which would not be a beneficial effect.

One new fishing access site would be established. This would help ease crowding for the bank angler and would be considered a beneficial effect.

The same number of gravel bars would be open to vehicle access as provided in Alternative B. No change from current conditions would provide no additional impacts.

The Proposed Action would have a beneficial effect.

Effects on Campers and Day-Use Visitors

Introduction

Campers and day-use visitors are recreationists participating in land-based activities. These visitors use the entire HRA year-round, with heaviest use occurring during the summer months. Concentrated use occurs at developed recreation sites, with heaviest use at Josephine County Park sites.

The BLM and Josephine County are the major providers of recreation sites within the HRA. The BLM manages four developed camp areas and seven developed day-use areas. Josephine County administers five developed camp areas that also encompass separate developed day-use areas.

Visitor services provide an indirect benefit to campers and day-use visitors by meeting the user's educational and informational needs.

The Galice-Hellgate National Back Country Byway would be maintained.

Campfire use would be subject to all State of Oregon regulations.

Firearm discharge regulations would have a beneficial effect on campers and day-use visitors by providing safe areas to recreate.

Effects Common to All Alternatives

Water-based activities, such as motorized tour boating, nonmotorized floating, motorized boating, and special boating events, may have indirect nonbeneficial impacts on day-use visitors due to sound levels and visual intrusions by watercraft.

Management actions that propose developing new recreation sites or improving existing sites, other than camping and day-use areas, would have an indirect beneficial effect on campers and day-use visitors by increasing recreation opportunities, dispersing use to reduce crowding at heavily used sites, and improving health and safety conditions.

Alternative A

Under Alternative A, eight existing camping areas would be maintained and no new camping areas would be developed. Primitive camping would not be allowed, a loss of 16.3 miles of camping opportunity. This reduction in camping opportunities (one less developed camp area and no primitive camping) from Alternative B would increase crowding at developed campsites and would not have a beneficial effect on campers.

Commercial and private users would be required to pack out human waste, when camped at a site where a public restroom is not available. Presently, only commercial users are required to pack out human waste. Alternative A would benefit campers and day-use visitors through improvements in proper human waste disposal by all visitors. Improvements to human waste disposal would improve health conditions and reduce the adverse visual effect of toilet paper “gardens”.

Fire pans would not be required. This could result in an increase in fire rings and campfire scars at recreation sites. These visual impacts would not have a beneficial effect on campers and day-use visitors.

The length of stay on BLM-administered land within the HRA would be 14 days per site, unless otherwise posted. Length of stay limits ensure recreation opportunities for a greater number of recreationists, than when no limit is imposed. Since there would be no change from current conditions, no additional impacts would occur.

Thirteen primitive and six developed day-use areas would be available under Alternative A. This reduction of one developed day-use only area from current conditions would reduce recreation opportunities and would not have a beneficial effect on day-use visitors.

Under Alternative A, one new Watchable Wildlife site would be designated. The addition of one site would have an indirect beneficial effect for campers by increasing recreation opportunities. An additional site would have a direct beneficial effect on day-use visitors.

Firearm discharge would be prohibited from June 1 through September 15 in six designated areas. Firearm discharge would also be prohibited within 150 yards of a residence, developed or undeveloped recreation site, occupied area, or at any time across or on any public road, trail, or body of water, where people or property is exposed to injury or damage. This increase in firearm discharge restrictions would have a beneficial effect on campers and day-use visitors.

Alternative A would not have a beneficial effect.

Alternative B - No Action

Under Alternative B, seven existing camping areas would be maintained. Primitive camping would be allowed on the right side of the river from Hellgate Recreation Site to Grave Creek and on the

left side of the river from Alameda Park to Grave Creek (16.3 miles). Since these would not change from current conditions, there would be no new impacts.

Commercial users would be required to pack out human waste when camped at a site where a public restroom is not available. Since this would not be a change from current conditions, there would be no new impacts.

Fire pans would be required. Requiring fire pans would benefit campers and day-use visitors, reducing the visual impacts of fire residue, rings, and scars left at recreation sites. Since there would be no change from current conditions, no new impacts to campers and day-use visitors would occur.

The length of stay on BLM-administered land within the HRA would be 14 days per site, unless otherwise posted. This ensures recreation opportunities for a greater number of recreationists, than when no limit is imposed. This would be no change from current conditions, so no new impacts would occur.

There would be seven developed day-use only areas, ten primitive day-use only areas, and three Watchable Wildlife sites available under Alternative B. No new sites would be proposed, therefore, there would be no new impacts to day-use visitors.

Firearm discharge would be prohibited within 150 yards of a residence, developed or undeveloped recreation site, occupied area, or at any time across or on any public road, trail, or body of water, where people or property is exposed to injury or damage. This would be no change from current conditions, so no new impacts would occur.

Alternative B would have a beneficial effect.

Alternative C

Under Alternative C, 11 new camp areas would be developed. Primitive camping would be allowed on both sides of the river from Hellgate Recreation Site to Grave Creek. The increase in developed camp areas (11 new areas) and primitive camping (8.7 additional miles), would be a beneficial effect to campers by dispersing use, reducing competition and crowding at campsites and improving health and safety conditions.

Commercial and private users would be required to pack out human waste when camped at a site where a public restroom is not available. Presently, only commercial users are required to pack out human waste. By adding pack out requirements for private users, campers and day-use visitors would benefit from improvements in proper human waste disposal by all visitors. Improvements to human waste disposal would improve health conditions and reduce the adverse visual effect of toilet paper “gardens”.

Fire pans would be required. Requiring fire pans would benefit campers and day-use visitors by reducing the visual impacts of fire residue, rings, and scars left at recreation sites. Since there would be no change from current conditions, no new impacts to campers and day-use visitors would occur.

The length of stay on BLM-administered land within the HRA would be five days per site in July and August, unless otherwise posted. This would decrease the length of stay by nine days. The shorter length of stay would increase the potential turn-over rate at campsites, making the sites available to more campers. A five-day limit, during the heaviest use season, would be a beneficial effect to campers.

Six developed day-use only areas and eleven primitive day-use only areas would be available under Alternative C. The reduction of one developed day-use only area and two primitive day-use only areas would reduce recreation opportunities in the HRA and would overall not be a beneficial effect on day-use visitors.

Under Alternative C, two new Watchable Wildlife sites would be designated. The additional sites would provide an indirect benefit to campers through an increase in day-use recreation opportunities. Two additional sites would provide a direct benefit to day-use visitors.

Firearm discharge would be prohibited in eight areas. Firearm discharge would also be prohibited within 150 yards of a residence, developed or undeveloped recreation site, occupied area, or at any time across or on any public road, trail, or body of water, where people or property is exposed to injury or damage. This increase in firearm discharge restrictions would have a beneficial effect on campers and day-use visitors.

Alternative C would have a beneficial effect.

Alternative D

Under Alternative D, 19 new camping areas would be developed. Primitive camping would be allowed from Hellgate Canyon to Grave Creek. Five new primitive camp areas would be added. This increase in developed camp areas (19 new areas) and primitive camping (10.7 additional miles), would be a beneficial effect on campers by dispersing use, reducing competition and crowding at campsites, and improving health and safety conditions.

Commercial and private users would be required to pack out human waste, when camped at a site where a public restroom is not available. Presently, only commercial users are required to pack out human waste. Human waste pack out requirements would benefit campers and day-use visitors through improvements in proper human waste disposal by all visitors. Improvements in human waste disposal would improve health conditions and reduce the visual effect of toilet paper “gardens”.

Fire pans would be required. Requiring fire pans would benefit campers and day-use visitors, reducing the visual impacts of fire residue, rings, and scars left at recreation sites. Since there would be no change from current conditions, no new impacts to campers and day-use visitors would occur.

The length of stay on BLM-administered land within the HRA would be four days per site in July and August, unless otherwise posted. This 10-day decrease in length of stay would increase the potential turn-over rate at campsites, making the sites available to more campers than presently allowed. A four-day limit, during the heaviest use season, would be a beneficial effect to campers.

Seven developed day-use only areas and eight primitive day-use only areas would be available. This would provide a slight decrease in day-use recreation opportunities. Although day-use recreation opportunities would decrease, the result would provide a beneficial effect to day-use visitors through improved health and safety conditions at the developed areas.

Under Alternative D, three new Watchable Wildlife sites would be designated. The additional day-use sites would provide an indirect beneficial impact to campers through an increase in recreation opportunities. Three additional sites would have a direct beneficial effect to day-use visitors.

Firearm discharge would be prohibited year-round in the HRA. Alternative D would provide maximum safety conditions, in relation to firearms, and would provide high beneficial effects for campers and day-use visitors.

Alternative D would have a beneficial effect.

Alternative E - Proposed Action

Under Alternative E, seven existing camp areas would be maintained and eight new camp areas would be developed. Five new primitive camp areas would be available. Primitive camping would be allowed from Hog Creek to Grave Creek. This increase in developed camping opportunities (7 new areas) and primitive camping (12.7 additional miles) would be a beneficial effect to campers by dispersing use, reducing competition and crowding at campsites and improving health and safety conditions.

Commercial and private users would be required to pack out human waste when camped at a site where a public restroom is not available. Presently, only commercial users are required to pack out human waste. Alternative E would benefit campers and day-use visitors through improvements in proper human waste disposal by all visitors. Improvements to human waste disposal would improve health conditions and reduce the visual effect of toilet paper “gardens”.

Fire pans would be required. Requiring fire pans would benefit campers and day-use visitors by reducing the visual impacts of fire residue, rings, and scars left at recreation sites. Since this is no change from current conditions, there would be no new impacts to campers and day-use visitors.

The length of stay on BLM-administered land within the HRA would be 14 days per site, unless otherwise posted. This length of stay ensures recreation opportunities for a greater number of recreationists, than when no limit is imposed. There would be no change from current condition, so no new impacts would occur.

Six developed day-use only areas and eight primitive day-use only areas would be available under Alternative E. This would be a reduction in developed recreation opportunities (one area) and primitive recreation opportunities (five areas) and would not be a beneficial effect to day-use visitors.

Under Alternative E, no new Watchable Wildlife sites would be designated and three existing sites would be maintained. No additional impacts to campers or day-use visitors from Watchable Wildlife sites would be realized in this alternative.

Firearm discharge would be prohibited within 150 yards of a residence, developed or undeveloped recreation site, occupied area, or at any time across or on any public road, trail, or body of water, where people or property is exposed to injury or damage. Fire arm discharge regulations would remain the same as in the No Action Alternative, therefore, there would be no additional impacts.

The Proposed Action would have a beneficial effect.

Effects on Recreational Mining

Introduction

Effects on recreational mining activities may occur as a direct or indirect result of the types and levels of watercraft and other dispersed recreation uses.

Recreational mining includes dredging and panning. Recreational dredging occurs on a limited basis in the Applegate Reach, but is prevalent in the Dunn Reach. Discussions related to recre-

ational dredging will focus only on that activity within the Dunn Reach. Recreational panning occurs throughout the HRA, however, it is a more common recreation venture in the Dunn Reach. Recreational panning is minimally affected by other activities on the river, therefore, panning will not be specifically addressed.

Effects Common to All Alternatives

Recreational mining activities are generally minimally impacted by individual MTBs. The MTB daily schedule provides information to the recreational miners and, while it does not directly impact them, a beneficial effect does result from the scheduling of boat traffic.

Commercial motorized angling and private motorized boating occurs on a small scale. Little cumulative effect would occur to recreational mining as a result of these activities, therefore, those activities will not be discussed.

Nonmotorized watercraft use has little or no effect on recreational mining.

There are reductions in impacts to recreational mining as a result of no-wake zones. Dredging within no-wake zones would be safer since wake turbulence would be minimal. The higher the number of no-wake zones identified, the fewer wake turbulence impacts to the recreation dredger. A reduction in impacts to dredging would result from the designation of thrill power maneuver areas.

The allowable dates for dredging in the HRA, set by the Oregon Department of Fish and Wildlife (ODFW) and the Oregon Division of State Lands (ODSL), are between June 15 and August 31 annually.

The issue of sound produced by recreational dredging is managed by the Oregon Division of State Lands and is a provision of ODSL permits that are issued allowing recreational dredging in the Rogue River.

Erosion sensitive areas are not an issue related to recreational mining, since no recreational mining, or other such activities, may cause disturbance to areas above the water level of the Rogue River.

For all alternatives, with the exception of Alternatives A and B, the corridor area is open to camping from at least Hellgate Recreation Site to Grave Creek. This would be a beneficial effect to the recreational miner since more primitive camping opportunities would be available.

Camping issues, such as human waste and group size limits, do not significantly change by alternative and do not have a negative effect on recreational mining.

The number of designated developed camping and day-use areas has little impact on the recreational dredger, since the areas open to recreational dredging would not be restricted. Dredgers camp in the immediate vicinity of their dredges for security and safety reasons, and normally utilize dispersed campsites along the river. Dredging normally does not occur at developed camping areas for the above reasons and no camping is allowed in day-use areas. With little impact and no significant changes in the numbers of these particular sites, the impacts to recreational dredgers would be low. However, it may not be a beneficial effect if dredgers use an area that was proposed to become a developed site.

The designation of new primitive camping areas and primitive day-use areas have little impact on the recreational miner. The miner tends to camp in a dispersed-type location, so primitive camp areas may be utilized. However, the recreational dredger normally utilizes a campsite accessible by

motor vehicle, since dredging equipment is cumbersome and includes fuel and other tools for the activity. The primitive day-use area would not be used since camping is not authorized.

Day-use issues that have been identified, in particular Back Country Byways, Watchable Wildlife sites, and firearm discharge regulations, have no impacts on recreational mining.

Social issues, such as trail use, boating access, and visitor services, have little or no effect on recreational mining.

Recreational mining could continue to be located within angling enhancement zones and fall chinook spawning areas since dredging is not allowed during spawning season. No impacts to recreational mining would occur as a result of these designations. However, there is potential for conflict between anglers and recreational dredgers.

Alternative A

The number of MTB trips in the summer in the Dunn Reach would total up to eight per day. This number of boats would cause less wake turbulence to dredgers than the current level of 19, which would be a beneficial effect.

A notice of display would be left to the discretion of the operator and no separation time between boats would be required. Although there would be daily trip schedules, the number of boats per trip would not be known to the recreational dredger, nor would the separation time of the boats. If wake turbulence is an issue to the dredger, there would be uncertainty as to when the entire number of boats in the group has passed and it is perceived safe to dredge. Because of the uncertainty of the number of boats and timing of boat passage at each dredge location, the impact to the recreational dredger would be not have a beneficial effect from a safety standpoint.

No safety sites of concern would be designated. There would be no change from current conditions, so no additional impacts would occur.

Special boating events would continue to include Boatnik and Labor Day boat races. No additional events would be authorized. Because this is no change from current conditions, there would be no additional impacts to the recreational dredger.

The length of stay for camping would remain at the current level of 14 days. This allows the recreational dredger ample time to operate, allowing two to four days total time to both set up and take down the dredge operations. No additional impacts would occur if the length of stay remained at 14 days.

Vehicle access would be curtailed at three locations. Two locations would remain open, Rocky Bar and the Griffin Lane Complex. The impact of no longer allowing vehicle access at three locations would not be beneficial to the recreational miner, since those sites would not be available for camping and vehicle parking at the dredge site.

Alternative A would not have a beneficial effect.

Alternative B - No Action

The maximum number of MTB trips in the summer in the Dunn Reach would remain at 19 per day. A notice of display would be required on the lead boat of all groups. No separation time between boats would be required. No safety sites of concern would be designated. Since there would be no change from current conditions, there would be no additional impacts to recreational dredgers.

Special boating events would continue to include Boatnik and Labor Day boat races. Those races would be limited to two hours per day. New events would be considered on a case-by-case basis, pending NEPA analysis. Because of the limited duration of the races, the short-term impacts to the recreational dredger from any new events would be minimal.

The length of stay for camping would remain at the current level of 14 days. This allows the recreational dredger ample time to operate, allowing two to four days total time to both set up and take down the dredge operations. No additional impacts would occur if the length of stay remained at 14 days.

The number of vehicle access areas would remain the same. Whitehorse, Griffin Lane Complex, Rocky Bar, Rand, and Argo would continue as vehicle access areas. Allowing this level of use to continue would have no additional impact on the recreational dredger.

Alternative B would have a beneficial effect.

Alternative C

The number of MTB trips occurring in the summer in the Dunn Reach would total up to 8 per day, a decrease from the 19 trips allowed to occur presently. This number of trips would cause less wake turbulence to dredgers than the present level. Compared to the current level of use, this would be a beneficial effect.

A notice of display would be required on all boats. A separation time of two minutes between boats would be required. If wake turbulence is an issue to the dredger, the effects would be beneficial, due to the knowledge afforded the dredger by the notice of display and timeliness of the boat passage.

Safety sites of concern would be designated annually and spotters would be required. With spotters in the areas, the spotter could work with the recreational dredger to inform them of when an MTB is about to enter the area. Providing a spotter and passing information to the dredger, the impact of wake turbulence would be low and this would be a beneficial effect.

No special boating events would be allowed. Boatnik and the Labor Day boat races would be curtailed and would be a beneficial effect to the recreational miner.

The length of stay for camping would be 5 days during the peak summer times in July and August, and 14 days during the off-peak times. The current year-round, 14-day length of stay for camping gave the recreational dredger ample time to operate, allowing two to four days total time to both set up and tear down the dredge operations. If the length of stay was limited to five days, it would not be a beneficial effect.

Vehicle access would continue on the gravel bars at Whitehorse, Rand, Rocky Bar, Argo, and Griffin Lane Complex. Two additional areas would be authorized for vehicle access. The additional vehicle access areas would be beneficial to the recreational miner. Those areas would allow additional opportunities for river access and possibly camping for the recreational miner.

Alternative C would have a beneficial effect.

Alternative D

The number of MTB trips occurring in the Dunn Reach would total up to 16 per day. This number of trips would be close to the number currently allowed (19 trips) and would be a beneficial effect on the recreational dredger, based on fewer trips and less wake turbulence.

A notice of display would be required on all boats. A separation time of two minutes between boats would be required. If wake turbulence is an issue to the dredger, it would be a beneficial effect, due to the knowledge afforded the dredger by the notice of display and timeliness of the boat passage.

Safety sites of concern would be designated and spotters would be required. With spotters in the areas, the spotter could work with the recreational dredger to inform them of when an MTB is about to enter the area. By providing a spotter and passing the information to the dredger, the impact of wake turbulence would be lessened, which would be a beneficial effect to the dredger.

Special boating events would continue to include Boatnik and Labor Day boat races. Three additional events would be considered on a case-by-case basis, pending NEPA analysis. Because of the limited duration of the races, the impacts to the recreational dredger would be minimal and would not be beneficial.

The length of stay for camping would be four days during the peak summer times in July and August, and 14 days during the off-peak times. The current year-round, 14-day length of stay for camping allows the recreational dredger ample time to operate, allowing two to four days total time to both set up and take down the dredge operations. Limiting the length of stay to four days would not be a beneficial effect.

Vehicle access would continue on the gravel bars at the Griffin Lane Complex, Rand, Rocky Bar, and Argo. Six additional areas would be authorized for vehicle access. The impact to the recreational miner of the additional vehicle access would be a beneficial effect. Those areas would allow additional opportunities for river access and possibly camping for the recreational miner.

Alternative D would have a beneficial effect.

Alternative E - Proposed Action

The number of MTB trips in the summer in the Dunn Reach would total up to eight per day. This would be a reduction from current levels (19 trips) and would cause less wake turbulence to dredgers, which would be a beneficial effect.

A notice of display would be required on all boats. A separation time of two minutes between boats would be required. If wake turbulence is an issue to the dredger, it would be a beneficial effect, due to the knowledge afforded the dredger by the notice of display and timeliness of the boat passage.

Safety sites of concern would be designated and spotters would be required. With spotters in the areas, the spotters could work with the recreational dredger to inform them of when an MTB is about to enter the area. By providing a spotter and passing information to the dredger, the wake turbulence from the MTBs would be lessened, which would be a beneficial effect.

Special boating events would continue to include Boatnik and Labor Day boat races. There would be no additional impacts to the recreational dredger from these events. Applications for new special boating events would be reviewed on a case-by-case basis. Impacts as a result of those reviews would be determined at a later date through a separate NEPA analysis.

The length of stay for camping would be 14 days. The current year-round, 14-day length of stay for camping provides the recreational dredger ample time to operate, allowing two to four days total time to both set up and take down the dredge operations. Since there would be no change to the length of stay, no additional impacts would occur.

Vehicle access would be allowed on the gravel bars at Griffin Lane Complex, Chair, Rand, Rocky Bar, and Argo. The impact to the recreational miner of the vehicle access would be a beneficial effect. In fact, removing access at Whitehorse and adding access at Chair would allow additional camping opportunities for the recreational miner.

The Proposed Action would have a beneficial effect.

Effects on Trail Users

Introduction

There are presently no designated trails administered by the BLM within the Hellgate Recreation Area. However, informal trails have been developed through the casual use of anglers, horseback riders, and mountain bikers. The recreationists seeking trail opportunities (trail users) within the HRA will be directly affected by three actions. First, developing new designated trails will increase the number of trail opportunities and improve public access. Second, improving and designating informal trails will provide a safer, higher quality experience for the user. Third, providing multi-use trails (hiker, horse, and bicycle) would also increase the number of opportunities for different types of users.

Developing any new trails will provide some level of benefit to the trail users. Public access would benefit by the higher number of new trail opportunities, regardless of the length. This access could be to the river's edge, parallel to the river, a destination-type trail to a specific site within the HRA, or an interpretive nature trail.

Trail users seek opportunities that are well-marked and maintained. By improving and designating the informal trail, some level of benefit to the trail user in the quality of experience will be realized. This benefit directly relates to the number of improved opportunities.

Multi-use trails provide opportunities that benefit several users at once. This benefit directly relates to the number of opportunities and the type of user allowed to participate in each opportunity.

Trails would be managed to provide safe access to a variety of recreational opportunities, including hiking, fishing, sightseeing, and nature study.

Effects Common to All Alternatives

Water-based recreational activities, such as MTBs, nonmotorized watercraft, motorized watercraft, and special boating events, would have little or no effect on trail users.

There would be indirect beneficial effects to trail users from camping and day-use opportunities, which provide additional recreation experiences within the same area.

Visitor services provide an indirect beneficial effect to the trail user by meeting the user's informational or educational needs.

Alternative A

Under Alternative A, one new trail would be developed and one informal trail would be improved. These 2 trails would provide 6.3 miles of opportunity to hikers. Horse and bicycle opportunities

would not be provided within the HRA. In comparison to Alternative B, this increase in the number of opportunities (two trails) as it relates to multi-use (no trails), safety, and quality of experience (one improved trail), would have a beneficial effect to the trail user.

Alternative A would have a beneficial effect.

Alternative B - No Action

Under the No Action Alternative, no new trails would be developed and no informal trails would be improved. Informal trails would continue to be developed over time by users. These trails would not be designated nor maintained, so safe, quality experiences would not be provided.

There would be little to no effect under Alternative B.

Alternative C

Three new trails would be developed and four informal trails would be improved, totaling 18.4 miles of opportunity. Of the 7 proposed trails, 5 trails would provide 7.4 miles of opportunity to hikers, 1 trail would provide 8.5 miles of opportunity for hikers and horseback riders, and 1 other trail would provide 2.5 miles of opportunity for hikers, horseback riders, and bicycles. In comparison to Alternative B, this increase in the number of opportunities (seven trails), as it relates to multi-use (two trails), safety, and quality of experience (four improved trails) would have a beneficial effect on the trail user.

Alternative C would have a beneficial effect.

Alternative D

Under Alternative D, nine new trails would be developed and eight informal trails would be improved, totaling 57.7 miles of opportunity. Of the 17 proposed trails, 10 of these trails would provide 16.9 miles of opportunity to hikers, 4 trails would provide 20.0 miles of opportunity for hikers and horseback riders, and 2 trails would provide 17.5 miles of opportunity for hikers, horseback riders and bicycles. In comparison to Alternative B, this increase in the number of opportunities (17 trails), as it relates to multi-use (7 trails), safety, and quality of experience (8 improved trails), would have a beneficial effect on the trail user.

Alternative D would have a beneficial effect.

Alternative E - Proposed Action

Two new trails would be developed and five informal trails would be improved, totaling 22.6 miles of opportunity. Of the 7 proposed trails, 5 trails would provide 11.6 miles of opportunity to hikers, 1 trail would provide 8.5 miles of opportunity for hikers and horseback riders, and 1 other trail would provide 2.5 miles of opportunity for hikers, horseback riders, and bicycles. In comparison to Alternative B, this increase in the number of opportunities (seven trails), as it relates to multi-use (two trails), safety, and quality of experience (five improved trails), would have a beneficial effect to the trail user.

The Proposed Action would have a beneficial effect.

Effects on Visitor Services

Introduction

For the purpose of this analysis, visitor services include imparting information and education to visitors, administering recreation permits and regulations, and integrating visitor input. These services are person-to-person contacts between the public and BLM staff. The management action proposed in the range of alternatives that could effect visitor services is facilities expansion. The size of the facility would affect the level of visitor services provided.

Presently, visitor services are provided at the Smullin Visitor Center at Rand and the Medford and Grants Pass BLM offices. The Smullin Visitor Center at Rand is the primary site for visitor services.

The present range and quality of visitor services would be maintained or improved at the Medford and Grants Pass (pending present relocation plans) BLM offices and at the Smullin Visitor Center at Rand.

Effects Common to All Alternatives

The present range and quality of visitor services would be maintained or improved at the Medford and Grants Pass (pending present relocation plans) BLM offices.

Alternative A

Under Alternative A, the Smullin Visitor Center at Rand would be maintained at current levels. Visitor services would remain at the same level as currently provided.

There would be little to no effect under Alternative A.

Alternative B - No Action

Under Alternative B, the Smullin Visitor Center would be expanded. Expansion of the visitor center would allow for an increase in visitor services.

Alternative B would have a beneficial effect.

Alternative C

Under Alternative C, the Smullin Visitor Center at Rand would be maintained at current conditions. Visitor services would remain at the same level as currently provided.

There would be little to no effect under Alternative C.

Alternative D

Under Alternative D, the Smullin Visitor Center at Rand would be maintained at current conditions. Visitor services would remain at the same level as currently provided.

There would be little to no effect under Alternative D.

Alternative E - Proposed Action

Under the Proposed Action, the Smullin Visitor Center would be expanded. Expansion of the visitor center would allow for an increase in visitor services.

The Proposed Action would have a beneficial effect.

Effects on Boating Safety

Introduction

Boating safety problems generally occur as a result of interactions between motorized and nonmotorized boats. As the number of boats increases, boating safety decreases. Most of the nonmotorized boating takes place in the Dunn Reach. Use levels for nonmotorized boating are usually highest on the hot summer weekends in July and August.

Any limits on boat use would increase boating safety. Use can be limited by restricting the river reach, shortening the season of use, curtailing the number of trips per day, or specifying hours of operation.

Effects Common to All Alternatives

For all alternatives, except Alternative A, MTBs would be required to operate off plane in Hellgate Canyon. This action is designed for the safety of the nonmotorized boater in this frequently congested area and would be a direct benefit to boater safety.

Visitor services would benefit boater safety by providing boaters with information and education.

Alternative A

Alternative A would limit motorized tour boats to 12 trips per day in the Applegate Reach and 8 trips per day in the Dunn Reach, except on holidays and weekends in July and August, when it would be 4 in the Dunn Reach. This would be a 37 percent reduction in the number of trips allowed and would have a beneficial effect. The season of use would be 153 days long, the same as Alternative B. The daily use window would be at the operator's discretion. Assuming daylight hours as hours of operation, in May and August the daily use window would be 15 hours and in September it would be 13 hours. This would be a 28 percent increase in the possible exposure time to other watercraft. This increase would not have a beneficial effect on boating safety. MTBs would not be required to be off plane in Hellgate Canyon, the area of greatest nonmotorized boat congestion. This would not be a beneficial effect to boating safety.

In Alternative A, the daily use level for nonmotorized watercraft would be 120 trips per day. This would be a reduction from Alternative B and would be beneficial to boating safety. Commercial motorized angling trips would decrease by 50 percent from Alternative B and would be beneficial to boating safety. Private motorized boating would occur year-round with no limits, but during July and August only five trips per day would be allowed. That would be a decrease in trips and would provide a beneficial effect on boating safety. Two special boating events would be allowed for a total of four hours per year, the same amount of exposure as occurs in Alternative B. Safety sites of concern would not be identified in Alternative A and spotters would not be required, the same as current conditions. There would be no additional impacts to boating safety.

Alternative A would have a beneficial effect.

Alternative B - No Action

Alternative B would limit motorized tour boats to 19 trips per day in both reaches, except on holidays and weekends in July and August in the Dunn Reach, when the number is 6 in the Dunn Reach. The season of use would be May 1 to September 30 (153 days). The daily use window in May through August would be 9:00 a.m. to 8:30 p.m., and 9:30 a.m. to 8:30 p.m. in September. These actions would have no effect on boating safety. MTBs would be required to be off plane in Hellgate Canyon.

Under Alternative B, the daily use level for nonmotorized and private motorized watercraft would be unlimited and use would occur year-round. Use levels for these two groups would increase without restriction. Any increase would not be a beneficial effect on boating safety. Commercial motorized angling would be limited to four trips per day for a 153-day season of use plus two trips per year. The number of trips allowed annually would be 614. Two special boating events would be allowed for a total of four hours per year. New boating events would be considered on a case-by-case basis, pending NEPA analysis. River closures for new events, if necessary, would be limited to a maximum of two hours per day. Safety sites of concern would not be identified in Alternative B and spotters would not be required.

Alternative B would not have a beneficial effect.

Alternative C

Alternative C would limit motorized tour boats to 12 trips per day in the Applegate Reach and 8 trips per day in the Dunn Reach, except on holidays and weekends in July and August, when it would be 4 in the Dunn Reach. This would be a 43 percent reduction in the number of trips allowed and would be a beneficial effect. The season of use would be from May 1 to September 30 (138 days), a decrease from Alternative B. The daily use window would be 10:30 a.m. to 7:00 p.m., May through September. This would be a 33 percent decrease in the number of hours per season. This would result in a beneficial effect on boating safety. Safety sites of concern would be designated annually in Alternative C and spotters would be required. This would have a beneficial effect on boating safety.

Under Alternative C, the daily use level for nonmotorized watercraft would be restricted in the future, if use limits are reached. Any limits in use levels would be a beneficial effect. Commercial motorized angling would be limited to six trips per day for a 138-day season of use. The number of trips allowed annually would increase by 35 percent and would not have a beneficial effect on boating safety. Private motorized boating would be allowed year-round in the Dunn Reach and May 1 to September 15 in the Applegate Reach. Use would be limited to 4 days on the river and 10 days off in the Dunn Reach in July and August. This would provide a reduction of 58 percent in the Applegate Reach and 11 percent in the Dunn Reach. Numbers would be limited in the future, if use limits are reached. Although the use limits are not known, the season of use would be shorter than currently allowed, which would be a beneficial effect. No special boating events would be allowed in the Hellgate Recreation Area. This would be a reduction from current conditions and would have a beneficial effect on boating safety.

Alternative C would have a beneficial effect.

Alternative D

Alternative D would limit motorized tour boats to 26 trips per day in the Applegate Reach and 16 trips per day in the Dunn Reach, except on holidays and weekends in July and August in the Dunn Reach, when the number is 8 in the Dunn Reach. This would be a 91 percent increase in the number of trips and would not have a beneficial effect on boating safety. The season of use would be April through October (214 days), an increase over the current season of use and, therefore, would not be a beneficial effect. The daily use window would be daylight hours. In May through August, the use window would be 15 hours per day, and in April, September, and October the use window would be 13 hours per day. For the 214-day use season, this would be a 74 percent increase in hours of operation over Alternative B and would not be a beneficial effect. Safety sites of concern would be designated annually in Alternative D and spotters would be required, which would provide a beneficial effect to boating safety.

Under Alternative D, the daily use level for nonmotorized and private motorized watercraft would be unlimited, the same as Alternative B. Commercial motorized angling would be limited to 60 trips per day for a 214-day season of use. The number of trips allowed annually would increase by 1,998 percent and would not be a beneficial effect to boating safety. Five special boating events would be allowed for an unlimited number of hours per year. This increase in hours would not have a beneficial effect on boating safety.

Alternative D would not have a beneficial effect.

Alternative E - Proposed Action

The Proposed Action would limit motorized tour boats to 19 trips per day in the Applegate Reach and 8 trips per day in the Dunn Reach, except on holidays and weekends in July and August in the Dunn Reach, when the number would be 4 trips before noon in the Dunn Reach. This would be the same level allowed currently in the Applegate Reach and would have no effect on safety. The limitations in the Dunn Reach would allow nonmotorized boats to float after noon on the busy summer weekends without the presence of MTBs. This would provide benefits to boating safety. The season of use would be May through September (153 days), the same as the No Action Alternative. The daily use window would remain the same. Safety sites of concern would be designated annually in Alternative E and a lead boat or spotters would be required. This would provide a beneficial effect on boating safety.

Under the Proposed Action, the daily use levels for nonmotorized and private motorized watercraft would be limited in the future, if use limits are reached. This decrease would have a beneficial effect on boating safety. Commercial motorized angling would be limited to six trips per day, an increase of two trips per day. The season of use for commercial motorized angling would be December 1 through September 30 in the Applegate Reach to protect fall chinook spawning and September 1 to May 31 to protect the nonmotorized floater experience. Use in the Applegate Reach would increase by 197 percent. Use in the Dunn Reach would increase by 167 percent. Two special boating events would be allowed for four hours per year, the same as currently allowed and there would be no change in safety. New events would be considered, based on NEPA analysis. River closures for new events, if necessary, would be limited to a maximum of two hours per day. New events would not be beneficial.

The Proposed Action would have a beneficial effect on boating safety.

Effects on Visitor Use

Introduction

Visitor use includes the full range of recreational use within the Hellgate Recreation Area. Effects on visitor use are addressed individually within the individual sections of this chapter, which are: motorized boaters, special boating event spectators and participants, nonmotorized floaters, boat anglers, bank anglers, outfitter services, visitor services, campers and day-use visitors, trail users, landowners, and recreational mining.

Effects on Law Enforcement and Emergency Services

Introduction

Law enforcement and emergency services are affected by the levels and types of use prescribed under each alternative.

Effects Common to All Alternatives

Additional demands to the current levels of law enforcement and emergency services would not have a beneficial effect. Use limits, increases in visitor use and watercraft, designation of restricted use areas (such as angling enhancement zones, sound sensitive areas, fall chinook spawning areas, etc.), and increases in regulations would increase demands on law enforcement and emergency services.

Visitor services provide a beneficial effect for law enforcement and emergency services, providing education and information for the recreating public.

Enforcement of use limits, permits, and fees for commercial outfitters (MTBs, angling, and floating) would be accomplished through compliance with BLM permit stipulations and would not affect law enforcement.

Emergency services would be provided.

Alternatives A

Use limits would be established for all watercraft, including motorized tour boats, nonmotorized watercraft, commercial motorized anglers, and private motorized boaters. By limiting visitor use and decreasing the number of camp areas and day-use sites, this alternative would reduce encounters and crowding. This would result in fewer conflicts and reduce the need for law enforcement, a beneficial effect. However, the degree of regulation required to enforce use limits would grow, increasing the need for law enforcement, which would not be a beneficial effect. The reductions in visitor use and crowding would also decrease the amount of emergency services needed, a beneficial effect.

Two special boating events would be allowed. Since this level would be the same as currently allowed, there would be no additional impacts to law enforcement and emergency services.

Fire pans would not be required, a reduction in regulations and enforcement from current conditions and a beneficial effect. All users would be required to pack out human waste. The addition of pack out requirements for private users would result in more regulations and increased enforcement. This would not be a beneficial effect on law enforcement.

Erosion sensitive areas, angler enhancement areas, fall chinook spawning areas, and no-wake zones would not be designated. This would be the same as current conditions and would have no effect on law enforcement.

Firearm discharge would be prohibited in six designated areas from June 1 to September 15. Firearm discharge regulations would prohibit discharge of firearms within 150 yards of a residence, building, developed or undeveloped recreation site, occupied area, or at any time across or on any public road, trail, or body of water, where people or property would be exposed to injury or damage. The addition of designated areas where firearm discharge would be prohibited would require more law enforcement and would not be a beneficial effect.

Vehicle access would be allowed to two gravel bars, a reduction of three sites from Alternative B. This reduction in access would decrease the land-based visitor use and, as a result, decrease the need for more law enforcement and emergency services, which would be a beneficial effect.

Alternative A would not have a beneficial effect.

Alternative B - No Action

Under Alternative B, use limits would be set for commercial motorized tour boats and commercial motorized boat angling. There would be no limits to private use and commercial nonmotorized floating. SRPs and SRP fees would be required for all commercial use.

The two current special boating events would be allowed and new events would be considered. The addition of any new events would have a short-term effect on law enforcement due to an increase in regulations and the presence of spectators in the HRA during the events. The influx of spectators to the events would also increase the need for additional emergency services during the events, which would not be a beneficial effect.

The number of day-use areas, camp areas, and trails would remain the same, with no additional needs for law enforcement and emergency services, resulting in no additional effect.

Fire pans requirements (fire pans would be required) and human waste pack out methods (required for commercial outfitters only) would remain the same, resulting in no additional effect on law enforcement.

Erosion sensitive areas, angler enhancement areas, fall chinook spawning areas, and additional no-wake zones would not be designated. This would not be a change from current conditions and there would have no beneficial effect on law enforcement.

Firearm discharge regulations would prohibit discharge of firearms within 150 yards of a residence, building, developed or undeveloped recreation site, occupied area, or at any time across or on any public road, trail, or body of water, where people or property would be exposed to injury or damage. There would be no change from current conditions and no additional effect on law enforcement.

Five vehicle access sites would remain. There would be no change from current conditions, so there would be no additional effect on law enforcement.

There would be little to no effect under Alternative B.

Alternative C

Under Alternative C, nonmotorized watercraft would be limited in the future. Commercial motorized angling would be limited in the number of trips and season of use. Private motorized boating would be limited in the Applegate Reach to May 1 to September 15. Use would occur year-round in the Dunn Reach, but would be limited to 4 days on the river and 10 days off the river in July and August. Private motorized boats would be limited in the future, if use limits are reached. Limits on private boaters would result in more regulations and the need for increased law enforcement, which would not be a beneficial effect.

There would be an increase in the number of day-use and camp areas, as well as three new trails. This would increase the land-based visitor use and increase the need for more law enforcement and emergency services, which would not be a beneficial effect.

No special boating events would be allowed in the HRA. This would eliminate the need for the law enforcement and emergency services required during the events and would be a beneficial effect.

Fire pans requirements would remain the same as current conditions (fire pans are required). All users would be required to pack out human waste. The addition of pack out requirements for private users would result in more regulations and increased enforcement. This would not be a beneficial effect on law enforcement.

Four erosion sensitive areas, 14 fall chinook spawning areas, and 5 additional no-wake zones would be designated. This would provide more regulations to enforce and would not be a beneficial effect on law enforcement.

Firearm discharge would be prohibited in eight areas from June 1 to September 15. Firearm discharge regulations would prohibit discharge of firearms within 150 yards of a residence, building, developed or undeveloped recreation site, occupied area, or at any time across or on any public road, trail, or body of water, where people or property would be exposed to injury or damage. The addition of designated areas where firearm discharge would be prohibited would require more law enforcement and would not be a beneficial effect.

Vehicle access would be allowed at two additional gravel bars, making a total of seven sites available. This would increase land-based visitor use and also increase the need for law enforcement and emergency services, which would not be a beneficial effect.

Alternative C would not have a beneficial effect.

Alternative D

Alternative D represents the maximum watercraft and visitor use alternative. The number of MTB trips would increase from 19 per day to 26. The number of commercial motorized angling permits would increase from 3 to 30. Alternative D would offer the highest number of day-use areas, camp areas, and trails, encouraging the largest number of visitors. Increased visitor use, and the resulting increase in encounters, conflicts, and other problems associated with crowding, would result in the need for more law enforcement and emergency services. This would not be a beneficial effect.

Five special boating events would be allowed and new events would be considered. The addition of any new events would have a short-term effect on law enforcement due to an increase in regulations and the presence of spectators in the HRA during the events. The influx of spectators to

the events would also increase the need for additional emergency services during the events, which would not be a beneficial effect.

Fire pans and human waste pack out would be required for all users, resulting in more regulations to enforce. This would not have a beneficial effect on law enforcement.

Two erosion sensitive areas, four fall chinook spawning areas, and five additional no-wake zones would be designated. This would result in more regulations to enforce and would not have a beneficial effect on law enforcement.

Discharging of firearms would be prohibited year-round in the entire river corridor and would have a beneficial effect on law enforcement.

Five additional gravel bars would be opened to vehicle access, providing a total of ten areas. The increase in access would result in more land-based visitation, increasing the need for more law enforcement and emergency service, which would not be a beneficial effect.

Alternative D would not have a beneficial effect.

Alternative E - Proposed Action

Under the Proposed Action, MTB trips would be reduced during the times and in the areas of greatest conflict with nonmotorized boaters. The number of commercial motorized angling trips would increase. With no limits set for private motorized boating, floaters, and nonmotorized anglers unless use limits are reached, this alternative would have the potential for an increase in those uses. An increase in use would increase the need for more emergency services. The increase in visitor use would also increase crowding and number of encounters and would result in increased conflicts among users. This would not be a beneficial effect on law enforcement.

The number of day-use areas would decrease slightly and eight new camp areas would be developed. Seven trails would be improved or developed. This would encourage use by more land-based visitors and would increase the need for more law enforcement and emergency services, which would not be a beneficial effect.

Two special boating events would be allowed and new events would be considered. The addition of any new events would have a short-term effect on law enforcement due to an increase in regulations and the presence of spectators in the HRA during the events. The influx of spectators to the events would also increase the need for additional emergency services during the events, which would not be a beneficial effect.

Fire pans and human waste pack out methods for all users would be required, resulting in more regulations and increased enforcement. This would not have a beneficial effect on law enforcement.

Four erosion sensitive areas, fourteen fall chinook spawning areas, and one additional no-wake zone would be designated. This would result in more regulations to enforce and would not be a beneficial effect for law enforcement.

Firearm discharge regulations would prohibit discharge of firearms within 150 yards of a residence, building, developed or undeveloped recreation site, occupied area, or at any time across or on any public road, trail, or body of water, where people or property would be exposed to injury or damage. There would be no change from current conditions and there would be no additional effect on law enforcement.

Five gravel bars would be open to vehicle access, the same as allowed currently. As a result, there would be no additional impacts to law enforcement or emergency services.

The Proposed Action would not have a beneficial effect.

Effects on Outfitter Services

Introduction

Outfitter services in the HRA have been under permit with the BLM since 1985. Motorized tour boat excursions provide the majority of services to the outfitted public, followed by fishing trips and white water floats (Austermuehle 1995).

Effects on outfitter services may occur as a direct or indirect result of the requirement of additional permits, fees, user fees, and use limits.

Effects Common to All Alternatives

Under all alternatives, commercial outfitters would be required to obtain a BLM Special Recreation Permit (SRP) and pay the associated fees.

There are indirect beneficial effects to outfitter services from developed camping and day-use sites, which provide additional recreation opportunities. Float-in primitive campsites along the river would have a beneficial effect on outfitter services since these sites are managed for all watercraft users.

The development or improvement of trails has little or no effect on outfitter services.

Visitor services provide an indirect beneficial effect to outfitter services by meeting the guides' and clients' informational or educational needs.

Improvements or additions to boat ramps would provide a beneficial effect on outfitter services, increasing the opportunity to launch at new sites and possibly easing crowding.

The opportunity to access gravel bars by vehicle would have no effect on outfitter services.

Alternative A

Use limits would be established for all watercraft, including motorized tour boats, nonmotorized floaters, nonmotorized boat anglers, commercial motorized anglers, and private motorized boaters. Permits and user fees would be required for all boaters. By limiting use for all watercraft, this alternative would decrease the need for outfitters to provide services and would result in a decline in business revenue. This would not be a beneficial effect.

The two current special boating events would be allowed. There would be no change from current impacts.

Alternative A would have a beneficial effect.

Alternative B - No Action

There would be no limit to the number of commercial permits, other than the current limits on MTBs (two permits) and commercial motorized angling (three permits). This alternative would provide opportunities for nonmotorized outfitter services to grow and would have little to no effect on them.

The two current special boating events would be allowed and new events would be considered on a case-by-case basis, pending NEPA analysis. Any additional boating events would have a short-term nonbeneficial effect on outfitter services during the event.

There would be little to no effect under Alternative B.

Alternative C

This alternative limits MTBs to 1,656 trips per year. This is a 43 percent reduction in the number of trips allowed and would not be a beneficial effect on the MTB commercial permittee. The trip reduction would limit the opportunity for the MTB outfitter to provide services and would result in a decrease in business. Alternative C has the potential of providing for a beneficial effect to the other water-based commercial services because of fewer encounters with the motorized craft.

Commercial motorized angling trips would be limited to 828 trips per year, a 35 percent increase. This alternative would increase the opportunity for outfitters to provide services and result in an increase in their business revenue.

Commercial watercraft users would be assessed a user fee (in addition to the Special Recreation Permit fee) and the number of commercial permits would be restricted, if use limits are reached. Limits on commercial use would increase the costs for doing business and limit opportunities. This would not have a beneficial effect on commercial outfitters.

No special boating events would be allowed in the HRA. This would be a beneficial effect for outfitter services because there would be no closures or restrictions placed on them during the events.

Alternative C would have a beneficial effect.

Alternative D

This alternative allows motorized tour boat trips to increase by 91 percent to 5,564 trips per year. This would increase the number of encounters between MTBs and other water-based outfitter services. While increasing use would be a beneficial effect for the MTB commercial operator, it would not be a beneficial effect to the other commercial services through increased encounters.

Commercial motorized angling would increase by 1,998 percent to 12,840 trips per year. This increase in trips would be beneficial to outfitter services by allowing more use and more opportunities for outfitters to provide services, resulting in an increase in business. The increase would not be a beneficial effect to other commercial outfitters through increased encounters.

Commercial watercraft users would be assessed a user fee in addition to the SRP fee. By increasing the outfitters' costs for doing business, this fee for commercial users would not have a beneficial effect on commercial outfitters.

Five special boating events would be allowed and new events would be considered on a case-by-case basis, pending NEPA analysis. Special boating events would have a short-term impact to outfitter services during the event.

Alternative D would have a beneficial effect.

Alternative E - Proposed Action

Under the Proposed Action, MTBs would continue at 2,907 trips per year. This would be the same as currently allowed and would represent no change in impacts.

Commercial motorized boat angling would be limited to 1,824 trips per year in the Applegate Reach and 1,638 trips per year in the Dunn Reach. This would be a 197 percent increase in the Applegate Reach and a 167 percent increase in the Dunn Reach. The increase in business opportunity would be a beneficial effect to outfitter services.

Commercial watercraft users would be required to pay a user fee in addition to SRP fees, if use limits are reached. By increasing the outfitters' costs, this would not have a beneficial effect on commercial outfitters.

The two current special boating events would be allowed and new events would be considered on a case-by-case basis, pending NEPA analysis. New events would have a short-term impact to outfitter services during the event.

There would be little to no effect under the Proposed Action.

Effects on Landowners

Introduction

The majority of landowners along the river do not like seeing or hearing river users. They are particularly sensitive to motorized tour boats (MTBs). The size of the boat, number of trips per day, amount of exposure time (grouping of boats), and hour of day the MTBs pass their property impacts landowners. Some landowners are concerned about soil erosion, especially erosion that is perceived to result from motorized tour boat activity.

Effects Common to All Alternatives

Landowners do not like people camping near their property. The majority of landowners that would be affected by camping on BLM-administered land are located above Hog Creek. Since all alternatives prohibit camping above Hog Creek, all alternatives would be equally beneficial to landowners on this issue.

Any action that would reduce the amount of time and frequency landowners would be subjected to boats would have a beneficial effect.

Alternative A

The motorized tour boat season of use would be May 1 to September 30 (153 days) and the number of trips per day would be reduced to 12, for a possible 1,836 trips per year. This represents

a 39 percent decrease in the number of trips per year, which would be a beneficial effect. MTBs would not be required to group their trips, which would potentially increase the exposure time of landowners to MTBs, which would not be a beneficial effect. One of the large MTBs would be removed from the fleet, reducing the visual intrusion of the larger boat on landowners and increasing the benefit to the landowner. The daily use window for MTBs would be at the operator's discretion, so trips could take place any time during the daylight hours. This would be a 28 percent increase in the number of hours per day landowners could be exposed to MTB traffic, which would not be a beneficial effect. Thrill power maneuvers would not be restricted and erosion sensitive and sound sensitive areas would not be designated. This would have no change from current conditions and no additional impact.

Nonmotorized floating would be restricted to 120 boats per day, private motorized boating trips would be limited to 30 trips per day, and commercial motorized angling would decrease by 50 percent. This would be a reduction from Alternative B and would be a beneficial effect to landowners.

The two current special boating events would be allowed. New events would not be considered. Since this is no change from current conditions, there would be no additional impacts to landowners.

Firearm discharge would be prohibited in six areas from June 1 to September 15. Firearm discharge would also be prohibited within 150 yards of a residence, developed or undeveloped recreation site, occupied area, or at any time across or on any public road, trail, or body of water, where people or property is exposed to injury or damage. Additional firearm discharge prohibitions would be beneficial to landowners.

Alternative A would have a beneficial effect.

Alternative B - No Action

Under the No Action Alternative, motorized tour boats would be limited to 19 trips per day in the Applegate Reach and 8 to 6 trips per day in the Dunn Reach. The season of use would be May through September (153 days) for a total possible number of trips of 2,907. The daily use window would be 9:00 a.m. to 8:30 p.m. from May through August, and 9:30 a.m. to 8:30 p.m. in September, for a yearly exposure of 1,744 hours. MTB trips would be required to travel in groups (up to six groups per day) with no separation time specified. The two large MTBs would remain in the fleet. MTBs would be allowed to perform thrill power maneuvers in any location at any time. There would be no erosion sensitive areas designated and no areas would be monitored. No sound sensitive areas would be designated. Since these would not change from current conditions, there would be no additional impacts to landowners.

Under Alternative B, nonmotorized and private motorized boating would be allowed to occur year-round with no limits in the future. An increase in these uses would not have a beneficial effect on landowners.

Commercial motorized angling would remain at 614 trips per year. The two current special boating events would be allowed. New boating events would be considered based on NEPA analysis. Firearm discharge regulations would remain the same as currently allowed. There would be no change in the impacts to landowners.

There would be little to no effect under Alternative B.

Alternative C

Under Alternative C, the season of use for MTBs would be May 1 to September 15 (138 days), a decrease of 15 days. Motorized tour boats would be limited to 12 trips per day in the Applegate Reach and 8 to 4 trips per day in the Dunn Reach. This represents a 43 percent reduction in the number of trips per year, which would be a beneficial effect for landowners. MTBs would be required to travel in one of six or fewer groups per day, with a less than two minute separation time between boats. Since the length of time landowners would be exposed to a group of MTBs would be limited, the result would be a beneficial effect to landowners. The large MTBs would be removed from the fleet, reducing the visual intrusion to landowners. The daily use window would be 10:30 a.m. to 7:00 p.m., May through September, a 33 percent reduction, and would be a beneficial effect. The establishment of erosion sensitive and sound sensitive areas would alleviate some landowner concerns. No thrill power maneuvers would be allowed within the Hellgate Recreation Area, thereby eliminating the sound associated with those maneuvers. This would allow more peaceful enjoyment by landowners of their river property.

Under Alternative C, the daily use level for nonmotorized watercraft would be limited in the future by an unspecified amount. Any increase in use levels above current levels would not be a beneficial effect. Commercial motorized angling would be limited to 6 trips per day for a 138-day season of use for a total of 828 trips per year. The number of trips allowed annually would increase by 35 percent and would not have a beneficial effect on landowners.

Private motorized boating would be allowed from May 1 to September 15 in the Applegate Reach (138-day season) and year-round in the Dunn Reach, except for July and August, when use is limited to 4 days on the river and 10 days off. Use would be further limited in the future, if use limits are reached. Although future use limits are not known, the season of use in the Applegate Reach would be reduced by 58 percent. The season of use in the Dunn Reach would be reduced by 11 percent. Both reductions would be a beneficial effect to landowners.

No special boating events would be allowed in the Hellgate Recreation Area. This 100 percent reduction from current conditions would be a beneficial effect to landowners.

Firearm discharge would be prohibited in eight areas. Firearm discharge would also be prohibited within 150 yards of a residence, developed or undeveloped recreation site, occupied area, or at any time across or on any public road, trail, or body of water, where people or property is exposed to injury or damage. Additional firearm discharge prohibitions would be beneficial to landowners.

Alternative C would have a beneficial effect.

Alternative D

Under Alternative D, the MTB season of use would be April through October (214 days). Motorized tour boats would be limited to 26 trips per day in the Applegate Reach and 16 to 8 trips per day in the Dunn Reach. This would be a 91 percent increase in number of trips per year and would not be a beneficial effect to landowners. MTBs would be required to travel in one of six or fewer groups per day with a less than two minute separation time between boats. Since the length of time landowners would be exposed to a group of MTBs would be limited, the result would be a beneficial effect to landowners. The two large MTBs would remain on the river and would cause a visual intrusion for landowners. The daily use window would be daylight hours. In May through August, the use window would be 15 hours per day, and in April, September, and October it would be 13 hours per day. For the 214-day use season, this would be a 74 percent increase and would not be a beneficial effect on landowners. Thrill power maneuvers would be allowed in areas away from erosion sensitive areas. No sound sensitive areas would be designated, but the designation of two erosion sensitive areas would be a beneficial effect.

Under Alternative D, the daily use level for nonmotorized and private motorized boating would not be limited, the same as currently allowed. Commercial motorized angling would be limited to 60 trips per day for a 214-day season of use. The number of trips allowed annually would increase by 1,998 percent and would not be a beneficial effect to landowners. Five special boating events would be allowed. This would be an increase of 150 percent and would not be a beneficial effect on landowners. New boating events would be considered based on NEPA analysis. Discharge of firearms would be prohibited in the Hellgate Recreation Area, which would be a beneficial to landowners.

Alternative D would not have a beneficial effect.

Alternative E - Proposed Action

The season of use for MTBs would be May 1 through September 30 (153 days). The Proposed Action limits motorized tour boats to 19 trips per day in the Applegate Reach and 8 to 4 trips per day in the Dunn Reach. The total possible number of trips per year would be 2,907, the same number of trips per year currently allowed and would have no additional effect on landowners. MTB trips would be required to travel in groups with less than two minutes separating each boat. The grouping of boats with a designated separation time would provide a beneficial reduction in landowner's exposure time to MTBs. One large MTB would be removed from the fleet. The landowners would benefit from the loss of the visual intrusion these large boats cause. The daily use window would remain the same (9:00 a.m. to 8:30 p.m., May through August, and 9:30 a.m. to 8:30 p.m. in September). MTBs would be allowed to perform thrill power maneuvers only in designated locations at designated times. This would decrease the sound level, which would be a beneficial effect for landowners. One erosion sensitive area would be designated and three other areas would be monitored. A sound sensitive area from Flanagan Slough to Jumpoff Joe Creek would be specified and would reduce sound from all river users.

Under the Proposed Action, the daily use level for nonmotorized and private motorized watercraft would be unlimited, with restrictions in the future, if use limits are reached. This would be a decrease from Alternative B and would be a beneficial effect on landowners. Commercial motorized angling would be limited to six trips per day for an increase of two trips per day. The total possible number of trips per year would increase by 197 percent in the Applegate Reach and 167 percent in the Dunn Reach. This would not be a beneficial effect to landowners. The two current special boating events would be allowed and new boating events would be considered based on NEPA analysis. Any increase over current levels would not be a beneficial effect to landowners.

Firearm discharge would be prohibited within 150 yards of a residence, developed or undeveloped recreation site, occupied area, or at any time across or on any public road, trail, or body of water, where people or property is exposed to injury or damage. This would be no change from current conditions and would have no additional effect.

The Proposed Action would have a beneficial effect.

Effects on Sound

Introduction

Sound impacts humans and other animals. There are three aspects of sound that vary by alternative: duration of the exposure, occurrence of the exposure (such as number of times per day), and loudness of the exposure. Various elements of each alternative can be manipulated to produce

changes in the duration and occurrence of the sound, however, loudness is more difficult to vary through management actions. In general, any action that reduces or changes the pattern of human activity could reduce one or more of the aspects of human-generated sound.

Effects Common to All Alternatives

Overall, most actions under Alternatives A-E would have little or no effect on sound, either beneficial or nonbeneficial. Sound generated by humans, for the most part, cannot be controlled, except for those sound sources regulated by the BLM, OSMB, DEQ, or other agencies.

Human-generated sound is expected to occur among the various users and it is accepted as part of the recreational experience. Sounds from motorized boats, people floating the river, campers, firearm discharge, hikers, day-use visitors, and vehicles may impact other Hellgate Recreation Area users, however, the primary impact would be to the landowner (see Chapter 4, Effects on Land-owners).

Overall, there are no effects to sound.

Effects on Transportation

Introduction

When the Rogue River was designated a National Wild and Scenic River, the public's awareness of the Rogue River's recreational benefits expanded to a national level. The increased awareness of the area led to an increase of visitors and consequently an increase in vehicle traffic. This section will show the rationale behind the transportation calculations, and predict how each alternative will influence the transportation system.

The capacity of a transportation system reflects its ability to accommodate a number of people or vehicles. The Level of Service (LOS) a transportation system delivers is a measure of the capacity and quality of flow and ranges from A to E. At LOS A, the transportation system is the best, providing no reduction in speed. An LOS E provides the maximum capacity of the transportation system. All projections will be compared to LOS E, which allows for speeds to reach 40 mph, provides virtually no passing zones, and equals a constant line of vehicles. The Merlin-Galice Road was analyzed and at a LOS E, it provided for a maximum of 2,094 vehicles per hour (vph), peak capacity, in both directions.

The main area of concern for vehicle traffic in the Hellgate Recreation Area is the Merlin-Galice Road, typically during the summer months of May through September. There is concern that the alternatives will push the existing transportation system beyond its means. Based on the visitor use projections, an average daily traffic flow was computed for each alternative.

Current vehicle trends show an increase of 2 percent per year, based on March 1983 and April 2000 traffic counts. These traffic counts were conducted by Josephine County, near the Galice Store and were then multiplied by a factor of four to predict summer traffic levels. This prediction resulted in 100 vph in both directions. In comparison, the calculated use at current levels is 232 vph in both directions.

The residual increase of 2 percent per year will not be included in the comparison of alternatives, so alternatives can be compared evenly. Additionally, each comparison will be made using the maximum allowable traffic counts, not the actual traffic counts. As a result, assumptions will not be

made about actual traffic counts. A baseline of 232 vph for Alternative B has already been established.

Alternative A

Alternative A is expected to produce 160 vehicles per hour in both directions. This would result in a 7 percent increase in traffic over the baseline (Alternative B) and, when compared to LOS E (2,094 vph), Alternative A would increase traffic to 8 percent of the maximum allowable for the road system. This alternative would have little effect on the transportation system.

There would be little to no effect under Alternative A.

Alternative B - No Action

Alternative B is expected to produce 149 vehicles per hour in both directions. When compared to LOS E (2,094 vph), Alternative B would produce traffic at 7 percent of the maximum allowable for the road system.

There would be little to no effect under Alternative B.

Alternative C

Alternative C is expected to produce 188 vehicles per hour in both directions. This results in a 26 percent increase in traffic over the baseline (Alternative B) and when compared to LOS E (2,094 vph), Alternative C would increase traffic to 9 percent of the maximum allowable for the road system.

There would be little to no effect under Alternative C.

Alternative D

Alternative D is expected to produce 230 vph in both directions. This would result in a 55 percent increase in traffic over the baseline (Alternative B) and when compared to LOS E (2,094 vph), Alternative D would increase traffic to 11 percent of the maximum allowable for the road system.

There would be little to no effect under Alternative D.

Alternative E - Proposed Action

The summary of options under Alternative E is expected to produce 155 vehicles per hour in both directions. This results in a 4 percent increase in traffic over the baseline (Alternative B) and when compared to LOS E (2,094 vph), Alternative E would increase traffic to 7 percent of the maximum allowable for the road system.

There would be little to no effect under the Proposed Action.

Effects on Socioeconomics

Introduction

The economic effects were estimated using an input-output model for Jackson and Josephine counties. Several studies regarding visitor use and expenditure patterns were consulted to estimate the type and amount of expenditures made by visitors to the Rogue River. Activity-based expenditures, such as permit/license fees, equipment rental, and guide fees were assigned to the activity. Expenditures for food, gifts, and lodging were assigned to a “type of lodging” category. Day-use was divided into activity and type of lodging categories to appropriately continue the division of expenditures into the two categories used. For this reason, day-use appears twice in Table 4-3 and Table 4-4.

Alternative A

Alternative A would restrict boating use in the Hellgate Recreation Area by placing limits on the numbers of craft permitted per day. These limits would restrict motorized tour boating and private floating opportunities below 1991 use levels. Current guided float use is below the craft limit set by this alternative, allowing for growth in this particular category of use. For analysis purposes, it is assumed that existing private float users will use guide services if unable to gain access privately. This would result in growth in guided float use above all other alternatives where float use (guided and private) is unconstrained in the short term and under Alternatives B and D in the long term.

Underlying patterns of recreation growth, particularly in land-based day-use, result in overall visitation and economic activity greater than 1991 use levels. Total place of work income is estimated to be \$31.44 million, an increase of \$4.56 million from baseline estimates. Jobs are estimated to be 1,722, an increase of 252 jobs from baseline levels.

The amount of place of work income and employment generated by motorized tour boating would decrease by 20 percent from the 1991 levels, from 262 to 209 jobs, and from \$4.79 million to \$3.81 million.

Alternative A would severely limit economic activity associated with boating use. Estimated economic activity would be 350 jobs and \$6.42 million in income less than Alternative B.

Alternative A would not have a beneficial effect.

Alternative B - No Action

Alternative B represents the continuation of existing management direction. Under this alternative, place of work income and jobs generated would be expected to rise. Growing population and aging of baby-boomers are the underlying causes of increasing visitation. Total place of work income is estimated to be \$37.86 million, an increase of \$10.98 million from baseline estimates. Jobs are estimated to be 2,072, an increase of 602 jobs from 1991 levels.

Alternative B would result in modest growth in economic activity associated with boating and other recreational uses in the Hellgate Recreation Area. External influences, such as population growth and growing numbers of retirees, are the underlying causes of this growth.

There would be little to no effect under Alternative B.

Alternative C

Alternative C places the greatest constraint on motorized tour boating of all the alternatives. In addition, Alternative C would eliminate special boating events. Estimated employment and income impacts reflect this reduced visitation. However, these estimates cannot address the importance and timing of peak levels of economic activity generated by these special events to the local economy. Other recreational activities are estimated to increase at rates similar to those in Alternative B. Under Alternative C, jobs and place of work income generated by Rogue River recreation is estimated to be 1,891 jobs and \$34.5 million. This would be an increase of 421 jobs and \$7.62 million above the 1991 levels.

Economic outcomes under this alternative may be lower than projected, if limits to growth in boating use are established in the future. For the economic analysis, this level is unknown and has not constrained estimated growth in boating use.

Alternative C moderately limits economic activity associated with boating use. Estimated economic activity would be 181 jobs and \$3.36 million in income less than Alternative B.

There would be little to no effect under Alternative C.

Alternative D

Of all the alternatives, Alternative D accommodates the largest rate of growth in visitation and results in the greatest increases in jobs and place of work income. This increased visitation would be accommodated by new visitor facilities, including trails, day-use sites, boat launches, and campgrounds. Jobs are estimated to increase by 897 to 2,367. Place of work income would increase by \$16.39 million to \$43.27 million.

Alternative D moderately increases economic activity associated with boating use and other recreational uses in the Hellgate Recreation Area. Estimated economic activity would be 295 jobs and \$5.41 million in income more than Alternative B.

Alternative D would have a beneficial effect.

Alternative E - Proposed Action

The Proposed Action would limit motorized tour boating to 1995 levels. This would be below current levels due to growth in use since 1995 and thus would require a small reduction. The resulting effect on hotel and motel lodging seen in Alternatives A and C is not as readily detectable for the Proposed Action, given the increases in other types of recreational uses.

Overall, both jobs and place of work income generated by Rogue River visitation would increase under this alternative. Jobs would increase by 616 to 2,086 and place of work income from \$11.21 to \$38.09 million, compared to the 1991 baseline.

Economic outcomes under this alternative may be lower than projected, if limits to growth in boating use are established in the future. For the economic analysis, this level is unknown and has not constrained estimated growth in boating use.

The Proposed Action slightly limits economic activity associated with motorized boating use. Estimated economic activity would be 14 jobs and \$230,000 in income less than Alternative B.

There would be little to no effect under the Proposed Action.

Effects on Environmental Justice

Effects Common to all Alternatives

The majority of impacts to the human environment are distributed based on the type of user and/or place of residence. The BLM could not discern from available data any use patterns or residential patterns related specifically to low-income or minority populations. The BLM has concluded that there are no disproportionate or adverse effects to low-income or minority populations.

There would be little to no effect.

Effects on Management Costs

Introduction

Management costs increase regardless of the alternatives.

There is a baseline cost for administration of the motorized tour boats, commercial motorized angling, and special boating events. The alternatives contain actions that in some cases add or eliminate requirements for the BLM administrators and will require additional or less time commitment, thus changing the baseline administrative cost. There are also baseline costs for maintenance of existing facilities and lands. The alternatives contain actions that add or eliminate facilities or requirements that would require more or less maintenance or enforcement time commitment from BLM personnel. Impacts to management costs will be shown in dollar amounts.

The following expenses reflect baseline costs in 2002 dollars.

The baseline cost for administering the two existing MTB permits in 2002 is \$15,000. Some management actions for MTBs will not impact the baseline administrative costs. These actions include the number of trips per day, the size of the boats, and the designation of no-wake zones. The costs would be the same for each alternative.

The total baseline cost for administering the three current commercial motorized angling permits is \$1,000 per year. Some management actions for commercial motorized boating would not impact the baseline administrative costs. These actions include the number of trips per year, designation of no-wake zones, and the size of the boats. Baseline costs for administering one to five permits would be the same.

Baseline costs for administration of the two existing special boating events is \$1,000 per year.

All alternatives require Special Recreation Permits and fees for commercial watercraft. The baseline costs for collecting fees and administering permits for commercial watercraft, other than MTBs and commercial motorized angling, is \$15,000 per year.

There are no baseline costs associated with private motorized boating, nonmotorized floating, and nonmotorized boat angling.

Development costs are one time costs incurred at the time of construction. These costs are associated with construction of campsites, day-use areas, trails, boat ramps, fishing access and a

visitor center. Maintenance costs are those costs associated with the upkeep of developed and primitive campsites, developed and primitive day-use areas, trails, boat ramps, and fishing access. General maintenance costs for all facilities and land in the Hellgate Recreation Area is \$70,000 per year. Enforcement of the length of stay limit for camping, and human waste pack out and firepan requirements is included in this total.

Costs associated with expansion of the Smullin Visitor Center at Rand cannot be determined until the level of expansion is decided.

Management costs pertain to BLM-administered sites and facilities only.

Alternative A

Under Alternative A, angling enhancement zones, fall chinook spawning areas, and sound sensitive areas would not be designated.

Private motorized boating would be allowed year-round, but would be limited to five trips per day in July and August. The costs of administering a permit and allocation system in order to limit use would add \$2,000 per year to management costs.

Commercial motorized boat angling trips per year would be reduced by half from current conditions. The number of permits would decrease to one permit. These actions would have no effect on management costs.

In Alternative A, the following actions for MTBs would remain the same as the No Action Alternative and would not effect management costs: season of use, thrill power maneuver areas, erosion sensitive areas, and safety sites of concern. The costs to administer the MTB permits would decrease under this alternative because some actions required under Alternative B would be eliminated. MTB trips would not be required to travel in groups, which would mean a decrease of \$1,000 per year. Boats would not be expected to provide a notice of display – a decrease of \$1,000 per year. The daily use window would be at the operator's discretion and would cost \$2,000 per year less in administrative costs. Off plane procedures would be at the operator's discretion, so this would decrease management costs by \$500 per year. A daily schedule would not be provided to the BLM and would cost \$500 per year less in administrative costs. Total reductions in management costs for MTB administration under Alternative A would be \$5,000 per year.

Special boating events would be limited to the two existing permits. No new events would be allowed. Management costs would remain at the baseline level.

Nonmotorized floating would be limited to 120 boat trips per day. Nonmotorized boat angling would be limited to 30 boat trips per day. Costs for administering and monitoring a permit system for both uses would be \$15,000 per year.

Three developed BLM-administered camp areas would be designated in Alternative A. These camp areas would cost \$60,000 to develop and \$2,000 per year above current costs to maintain. This would be \$10,000 more than development costs for two campgrounds in the No Action Alternative. No new primitive camp areas would result in a \$1,000 decrease to maintenance costs. Human waste pack out and firepan regulations would increase monitoring and enforcement costs by \$1,500. The length of stay limit would be 14 days, the same as the No Action Alternative. Six developed and 13 primitive day-use areas would be specified, same as currently designated. There would be no additional costs above the baseline to maintain. One new trail would be developed and an existing trail would be expanded or improved for a cost of \$16,000. Trail maintenance costs would increase by \$2,000. One existing BLM-administered boat ramp would be improved

(Grave Creek) for \$5,000. One undeveloped boat access site (Argo) would be improved at \$10,000. Maintenance costs for the ramps would increase by \$1,000 per year. No new fishing access would be developed and no maintenance would be required.

Alternative A would increase general administrative costs by \$10,500 over baseline costs. New development costs would be \$91,000 with an associated additional maintenance cost of \$4,000 per year.

Alternative A would not have a beneficial effect.

Alternative B - No Action

Management costs would remain the same as the baseline, except for development and maintenance costs resulting from new development.

The baseline administrative costs include: MTB permit (\$15,000), commercial motorized angling permit (\$1,000), other commercial permits (\$15,000), special boating events (\$1,000), site maintenance for all existing sites (\$70,000), and miscellaneous administration costs (\$10,000).

The costs associated with new development, under this alternative, include: two new camping areas (\$50,000 for development and \$2,000 additional maintenance costs), improvement of one existing boat ramp (\$5,000), improvement of two undeveloped boat access sites (\$20,000), maintenance costs for boat ramps (\$1,000), and one fishing access site (\$100,000 for development and \$3,000 for maintenance).

Under Alternative B, the baseline general administrative costs are \$112,000. New development costs would be \$175,000 with an associated additional maintenance cost of \$6,000 per year.

Alternative B would not have a beneficial effect.

Alternative C

Under Alternative C, eight angling enhancement zones would be designated for a cost of \$500 per year. These expenses are related to educational and monitoring costs. Thirteen fall chinook spawning areas would be designated. These areas would cost \$1,000 per year for monitoring and education. One six-mile sound sensitive area would be designated for a cost of \$1,000 per year for education and monitoring.

Private motorized boating would be limited in the future, if use limits are reached. The costs of administering a permit and allocation system in order to limit use would add \$2,000 per year to management costs.

Commercial motorized boat angling trips per year would remain the same as the No Action Alternative. There would be no effect on management costs.

Under Alternative C, the following actions for MTBs would remain the same as the No Action Alternative and would not affect management costs: notice of display and daily use window. The season of use for MTBs would end September 15 and would be extended to September 30, if monitoring indicated no fall chinook spawning is occurring. Monitoring for spawning would increase administrative costs by \$3,000 per year. MTB trips would be required to travel in groups, with two minutes or less separating the boats. This would increase costs for monitoring by \$1,000 per year. Thrill power maneuvers would not be allowed. The cost to monitor this restriction is \$1,000 per year. Four erosion sensitive areas would be designated and monitoring costs would be

\$3,000 per year. Safety sites of concern would be designated annually and land or lead boat spotters would be required. This would increase management costs by \$2,500 per year. A daily schedule would be provided to the BLM and would cost \$500 per year in administrative costs. Total increases in management costs for MTB administration under Alternative C would be \$11,500 per year.

Special boating events would not be allowed. There would be no management costs associated with special boating events. This would decrease costs by \$1,000 per year.

Nonmotorized floating would be limited to 500 boat trips per day. Nonmotorized boat angling would be limited, if use limits are reached. Permits would be required, but not restricted until use limits are reached. Fees would be required if use is restricted. The permit system would cost \$5,000 per year to administer. If an allocation system is required, it would cost an additional \$10,000 per year.

Twelve developed camp areas would be designated under Alternative C. These camp areas would cost \$420,000 to develop and \$10,000 per year above the baseline to maintain. There would be no costs to the BLM associated with the Indian Mary Park Extension. No new primitive camp areas would be designated. The length of stay limit would be five days per site in July and August. This limit would cost an additional \$2,000 per year to enforce. Seven developed and eight primitive day-use areas would be specified. The day-use areas would cost \$40,000 to develop and \$2,000 to maintain. Human waste pack out and firepan requirements would increase monitoring and enforcement costs by \$1,500. Three new trails would be developed and four existing trails would be improved and expanded for a cost of \$112,000. Trail maintenance costs would increase by \$14,000. One existing boat ramp (Grave Creek) would be improved for \$5,000. Two undeveloped boat access sites (Rand and Argo) would be improved for \$20,000. Maintenance costs for the ramps would increase by \$1,000 per year. No new boat ramps would be developed. Three new fishing access sites would be constructed for \$150,000 and maintenance costs for five total access sites would be \$4,500 per year.

Alternative C would increase general administrative costs by \$29,000 over baseline costs. New development costs would be \$747,000 with an associated additional maintenance cost of \$35,000 per year.

Alternative C would not have a beneficial effect.

Alternative D

Under Alternative D, angling enhancement zones would be designated for all watercraft for a cost of \$500 per year. These expenses are related to educational and monitoring costs. Four fall chinook spawning areas would be designated. These areas would cost \$500 per year for monitoring and education. No sound sensitive areas would be designated.

Private motorized boating would be year-round with no limits.

Commercial motorized boat angling permits would increase to 30. Management costs would increase by \$3,000 per year.

Under Alternative D, the following actions for MTBs would not effect management costs: season of use and notice of display. MTB trips would be required to travel in groups, with two minutes or less separating the boats. This would increase costs for monitoring by \$1,000 per year. The daily use window would be during daylight hours. No monitoring would be necessary and costs would decrease by \$2,000 per year. Off plane procedures would be required in Hellgate Canyon and in five erosion sensitive areas. The increase in management costs would be \$500 per year. Thrill

power maneuvers would only be allowed in designated areas outside of erosion sensitive areas. The cost to set up and monitor this restriction is \$2,000 per year. Two erosion sensitive areas would be named and monitoring costs would be \$3,000 per year. Safety sites of concern would be designated annually and land or lead boat spotters would be required. This would increase management costs by \$2,500 per year. A daily schedule would be provided to the BLM annually and would cost \$500 per year in administrative costs. Total increases in management costs for MTB administration under Alternative D would be \$7,500 per year.

Special boating events would increase to five events. Costs would increase by \$3,000 per year. New events would be considered on a case-by-case basis and each new permit would add to the administrative costs.

Nonmotorized floating and nonmotorized boat angling would be not be limited. Fees and permits would be required. It would cost \$5,000 per year for a permit system and \$500 per year for fee collection.

Twenty-one developed camp areas would be designated in Alternative D. These camp areas would cost \$675,000 to develop and \$16,000 per year above the baseline to maintain. Five new primitive camp areas would be available and would cost \$3,000 per year to maintain. The length of stay limit would be four days per site in July and August. This limit would cost an additional \$2,000 per year to enforce. Seven developed and eight primitive day-use areas would be specified. The day-use areas would cost \$80,000 to develop and \$2,000 per year to maintain. Human waste pack out and firpan regulations would increase monitoring and enforcement costs by \$1,500. Nine new trails would be developed and eight trails would be expanded or improved for a cost of \$140,000. Trail maintenance costs would increase by \$17,000 per year. One existing boat ramp (Grave Creek) would be improved for \$5,000, two undeveloped BLM boat access sites (Rand and Argo) would be improved for \$20,000, and two new boat ramps would be constructed for \$120,000. Maintenance on BLM boat ramps would increase by \$4,000 per year. Three new fishing access sites would be constructed for \$150,000 and maintenance costs for the five total access sites would be \$4,500 above the general maintenance costs.

Alternative D would increase general administrative costs by \$23,500 over baseline costs. New development costs would be \$1,190,000 with an associated additional maintenance cost of \$46,500 per year.

Alternative D would not have a beneficial effect.

Alternative E - Proposed Action

Under the Proposed Action, eight angling enhancement zones would be designated for all watercraft for a cost of \$500 per year. These expenses are related to educational and monitoring costs. Fourteen fall chinook spawning areas would be designated. These areas would cost \$500 per year for monitoring and education. One four-mile sound sensitive areas would be designated. It would cost \$500 per year to monitor and provide education to all river users.

Private motorized boating would be year-round with limits in the future, if use limits are reached. There would be no costs until use is limited. A permit and allocation system would cost \$2,000 per year to administer.

Commercial motorized boat angling permits would remain at three. Management costs would increase by \$500 per year due to the imposition of new restrictions.

Under the Proposed Action, the following actions for MTBs would be the same as the No Action Alternative and would not effect management costs: daily use window, off plane procedures, and

notice of display. The MTB season would end when fall chinook spawning is detected. This would increase cost by \$3,000 per year to monitor the spawning areas. MTB trips would be required to travel in groups, with two minutes or less separating the boats. This would increase costs for monitoring by \$1,000 per year. Thrill power maneuvers would only be allowed in designated areas from 10:00 a.m. to 5:00 p.m. The cost to set up and monitor this restriction would be \$2,000 per year. One erosion sensitive area would be named and three others would be monitored. Monitoring costs would be \$3,000 per year. Safety sites of concern would be designated annually and land or lead boat spotters would be required. This would increase management costs by \$2,500 per year. A daily schedule would be provided to the BLM annually and would cost \$500 per year in administrative costs. Total increases in management costs for MTB administration under the Proposed Action would be \$12,000 per year.

Special boating events would remain at two events. New events would be considered on a case-by-case basis and each new permit would add to the administrative costs. Costs to administer an unknown number of new permits is estimated to be another \$2,000 per year.

Nonmotorized floating and boat angling would be limited in the future, if use limits are reached. Fees and permits would be required. It would cost \$5,000 per year for a permit system and \$500 per year for fee collection.

Eight developed BLM-administered camp areas would be designated in the Proposed Action. These camp areas would cost \$200,000 to develop and \$6,000 per year above the baseline to maintain. There would be no costs to the BLM associated with the Indian Mary Park Extension. Five new primitive camp areas would be available and would cost \$3,000 per year to maintain. The length of stay limit would be 14 days, the same as the No Action Alternative. No new day-use areas would be specified for no increase in cost. Human waste pack out and firepan requirements for all users would increase monitoring and enforcement costs by \$1,500. Two new trails would be developed and five trails would be improved and expanded for a cost of \$100,000. Trail maintenance costs would increase by \$13,000 per year. One existing boat ramps (Grave Creek) would be improved for \$5,000, two undeveloped boat access sites (Rand and Argo) would be improved for \$20,000, and no new boat ramps would be constructed. Maintenance costs for the boat ramps would increase by \$1,000 per year. Two new fishing access sites would be constructed for \$80,000 and maintenance costs for the three total access sites would be \$3,000.

The Proposed Action would increase general administrative costs by \$25,000 over baseline costs. New development costs would be \$405,000 with an associated additional maintenance cost of \$26,000 per year.

The Proposed Action would not have a beneficial effect.

Effects on Gross Revenues

Introduction

Gross revenues are those monies generated through private and commercial use of public lands. Revenues may be produced through fees charged for commercial activity and uses such as parking, camping, boating, or hiking. Presently, no fees are levied for uses other than commercial.

Revenues are derived through commercial outfitter fee submission as part of the BLM's SRP system. These revenues are primarily generated by three commercial user groups: motorized tour boats, guided fishing, and guided floating. Commercial users pay 3 percent of their reported gross

income. Motorized tour boat fees are the dominant contributor to the total fees collected from commercial activities. From 1996 through 2000, MTBs contributed approximately 80 percent of the gross revenues earned in the HRA (Austermuehle 2001).

The Recreation Fee Demonstration Project provides a funding pathway to allow fee revenues to return to the resource where they were earned.

Commercial SRP fees will be required in all alternatives.

Effects Common to All Alternatives

For the purpose of this effects assessment, alternatives that sustain or increase fees would be a beneficial effect. If fees decrease, then it would not be a beneficial effect. The assumption is that the present dollar amount of fees collected would work to beneficially maintain the quality of the recreation resource.

Special boating events generate revenue in the form of Special Recreation Permit fees. This would have a beneficial effect.

Visitor services, law enforcement, camping and day-use areas, boat ramps, trails, and vehicle access points have no effect on gross revenues.

Alternative A

Use limits would be established for all watercraft, including motorized tour boats, nonmotorized floaters and anglers, commercial motorized anglers, and private motorized boaters. Limiting all watercraft has the capacity to reduce all commercial use, thus reducing fees generated and reducing gross revenues. Alternative A would reduce MTBs use levels by 41 percent of present levels, which would decrease gross revenues. These reductions would not have a beneficial effect on gross revenues.

Two special boating events would be authorized, the same as currently allowed. This would have no additional impact on gross revenues.

Fees required for private water-based use would generate additional revenue and would have a beneficial effect on gross revenues.

Alternative A would not have a beneficial effect.

Alternative B - No Action

There would be no permits, fees, and use limits other than those currently established for commercial use. If use continues at present levels, this would have little to no effect on gross revenues. Nonmotorized floating and angling levels would not be limited and commercial use by those groups could increase. MTB use levels are at 45 percent of the authorized passenger space capacity. If use increases above current levels, the increase in gross revenues would have a beneficial effect.

Two special boating events would be allowed and additional events would be considered on a case-by-case basis. Any additional events would have a beneficial effect on gross revenues.

Fees would not be required for the private boater. This would have no effect on gross revenue.

There would be little to no effect under Alternative B.

Alternative C

This alternative would limit the number of MTB trips allowed, a reduction of 51 percent of the passenger spaces allowed under current management. A decrease in the number of trips would reduce the income of the permittee and, thus, the gross revenues collected for permit fees. This would not have a beneficial effect on gross revenues.

Commercial motorized angling would be limited in trips and season of use; however, use would increase by 35 percent. This would have a beneficial effect on gross revenues.

No special boating events would be allowed in the HRA, eliminating permit fees collected, which would not have a beneficial effect on gross revenues.

Fees would be required on commercial and private water-based users, if use limits are reached and limits are imposed. This would generate additional revenue and would have a beneficial effect on gross revenues.

Alternative C would not have a beneficial effect.

Alternative D

This alternative allows considerable growth for MTBs with the largest increase in number of trips. The number of MTB passengers could increase 91 percent above current maximum authorized levels. Commercial motorized angling trips could increase by 1,998 percent. With commercial use at a maximum, this alternative would have a beneficial effect on gross revenues because of increased commercial use and permit fees.

Five special boating events would be allowed. This would have a beneficial effect on gross revenues.

Fees would be required for commercial and private water-based users and for vehicle access. This would generate additional revenue and would have a beneficial effect on gross revenues.

Alternative D would have a beneficial effect.

Alternative E - Proposed Action

This alternative would maintain the number of MTB trips at current levels. There would be no additional effect on gross revenues.

Commercial motorized angling could increase by 197 percent in the Applegate Reach and 167 percent in the Dunn Reach. This would increase revenues, which would have a beneficial effect.

Two special boating events would be allowed and additional events would be considered on a case-by-case basis. Any additional events would have a beneficial effect on gross revenues.

Fees would be required for commercial and private water-based users and for vehicle access, if use limits are reached and limitations are imposed. This would generate additional revenue, which would have a beneficial effect on gross revenues.

The Proposed Action would have a beneficial effect.

Critical Elements of the Human Environment

The critical elements of the human environment to be considered in this analysis include: air quality, flood plains, cultural/paleontological resources, prime or unique farmlands, Native American religious concerns, threatened or endangered species, areas of critical environmental concern (ACECs), designated or potential wild and scenic rivers, wilderness or wilderness study areas (WSAs), and whether any actions violate law.

The critical elements are not significantly impacted. The alternatives include actions for varying degrees of resource use and protection. As a result, there are varying degrees of impacts, but none are significant. These critical elements will also be considered, as appropriate, in site-specific project design and implementation.

ACECs, WSAs, and prime or unique farmlands are not in the study area and these elements were not examined. Impacts to the Hellgate segment of the Rogue National Wild and Scenic River are examined in detail by this EIS.

Energy Requirements

The alternatives do not have an adverse energy impact on energy development, production, supply, and/or distribution (Executive Order 13212).

Alternatives encouraging higher levels of visitation would cause higher consumption of fossil fuels.

Unavoidable, Irretrievable, and Irreversible Effects

Effects of Alternatives on Threatened and Endangered Species and Critical Habitat

Regardless of the alternative, protection of listed species would take precedence over any management activities.

Since any new development projects will be covered by site-specific NEPA analysis, any effects will be handled under separate documentation tiered to this EIS. Because of this, there will be no effect on the federally-listed, *Fritillaria gentneri*, under this Proposed Action.

Environmental Effects that Cannot be Avoided

Implementing any alternative would result in some degree of environmental effects that cannot be avoided. Standards, guidelines, and mitigation measures are intended to keep the extent and duration of these effects within acceptable levels; adverse effects cannot be completely eliminated.

Landowners – Some reduction of the solitude experience due to sounds generated by motorized watercraft and other on-river users.

Watershed – Some loss of vegetated areas and beaches resulting from natural fluctuating water flows and recreation use. Continuation of littering and vandalism due to recreational users.

Wildlife – Temporary displacement of wildlife when their habitat is disturbed by recreation use.

Fisheries – Temporary displacement of fisheries when their habitat is disturbed by recreation use.

Fire Management – Continuation of (and/or increases in) fire risk from recreation use.

Relationship Between Short-Term Uses and Long-Term Productivity

Short-term use of the land includes the day-to-day and even year-to-year activities that visitors and BLM managers engage in while in the river corridor. It includes activities that remove resources from the land, such as hunting, fishing, and berry picking; as well as activities that do not, such as rafting, power boating, scenery viewing, hiking, and photography. Short-term actions include management activities, such as vegetation management, often performed to permit, encourage, or discourage other activities such as those noted above.

Long-term productivity refers to the land's continuing ability to produce commodities, such as fish, wildlife, and plant products; as well as amenities, such as scenery and recreation opportunities for future generations. This ability depends on management practices and uses that do not impair soil productivity or water quality to the point they are no longer capable of providing habitat, alter the natural landscape beyond its ability to recover, or impair geologic features to the extent they lose identity.

Recreation Uses– The season of use for motorized tour boats enhances the fisheries resource.

Irreversible and Irretrievable Commitment of Resources

Irreversible resource commitments are actions that either deplete a nonrenewable resource or disturb another resource to the point where it cannot be renewed within 100 years. Examples of irreversible commitments are the disturbance of cultural sites, the loss or destruction of a significant geologic feature, or the loss of critical habitat.

There are none in the planning area.

Irretrievable resource commitments are those that are lost for a period of time because that resource is being used for some other, generally incompatible, purpose. Examples of irretrievable resource commitments are the loss of developed recreational opportunities in areas where wildlife management is the emphasis or, conversely, the loss of wildlife habitat opportunities in highly-developed recreation areas. Irretrievable commitments may not extend forever because they can be altered through changes in management direction.

Irretrievable resource commitments are unavoidable. It is impossible to manage resources for any purpose without precluding the opportunity to use them for some other purposes.

The following are irretrievable resource commitments:

- Managing portions of the river corridor for nonmotorized recreation precludes opportunities for motorized recreation in those areas and vice versa.
- Managing some areas primarily as habitat precludes opportunities for some forms of recreation.

Table 4-1. Motorized Tour Boat Limit Comparison by Alternative

	Alternative A	Alternative B No Action	Alternative C	Alternative D	Alternative E Proposed Action
Applegate Reach	12 round trips per day maximum.	19 round trips per day maximum.	12 round trips per day maximum.	26 round trips per day maximum.	19 round trips per day maximum.
Dunn Reach*	8 round trips per day maximum, except 4 round trips per day on weekends and holidays in July and August.	19 round trips per day maximum, except 6 round trips per day on weekends and holidays in July and August.	8 round trips per day maximum, except 4 round trips per day on weekends and holidays in July and August.	16 round trips per day maximum, except 8 round trips per day on weekends and holidays in July and August.	8 round trips per day maximum, except 4 round trips per day before noon on weekends and holidays in July and August. No trips after noon.

*NOTE: Dunn Reach trips are also part of the Applegate allocation.

Table 4–2. Visitor Use Projections by Activity Type for 2007

Activity	1991	Alternative A	Alternative B No Action	Alternative C	Alternative D	Alternative E Proposed Action
MTB	72,860	57,946	89,310	53,758	116,487	85,122
Private Floaters ¹	28,404	4,004	31,544	31,443	31,544	31,544
Commercial Floaters	5,965	140	8,296	8,296	8,296	8,296
Bank Anglers	7,348	8,049	8,049	8,049	8,049	8,049
Private Boat Anglers	6,782	1,204	5,022	5,022	5,022	5,022
Commercial Anglers ²	2,690	2,535	2,028	1,980	3,850	1,980
Day-use Visitors	399,026	621,960	643,996	682,586	703,122	672,310
Campers	68,904	84,949	87,064	88,954	92,540	87,064
Lodge Visitors	15,539	25,942	25,942	25,942	25,942	25,942
Miscellaneous	10,153	16,000	16,000	16,000	16,000	16,000
Total	617,671	822,729	917,251	922,030	1,010,852	941,329

¹Includes private motorized boaters.²Includes motorized and nonmotorized angling.

Table 4-3. Place of Work Income Generated by Activity and Lodging Class

	Alternative A	Alternative B No Action	Alternative C	Alternative D	Alternative E Proposed Action
Motorized Tour Boating	3,810,529	5,873,026	3,535,126	7,660,185	5,597,623
Private Floating	19,339	152,358	152,358	152,358	152,358
Commercial Floating	11,057	655,218	655,218	655,218	655,218
Bank Angling	38,877	38,877	38,877	38,877	38,877
Private Boat Angling	5,815	24,256	24,256	24,256	24,256
Commercial Boat Angling	233,879	187,103	182,675	355,201	182,675
Miscellaneous Activity	136,000	136,000	136,000	136,000	136,000
Rogue River Day Only	4,540,308	4,701,171	4,982,878	5,132,791	4,907,863
Rogue River Camping	722,067	740,044	756,109	786,590	740,044
Rogue River Lodging	503,534	503,534	503,534	503,534	503,534
Camping Total	3,323,884	3,811,157	3,713,722	4,169,313	3,817,611
Hotel/Motel	6,892,980	8,690,887	7,106,220	10,098,150	8,550,766
Friends/Relatives	1,569,038	1,917,893	1,876,847	2,139,539	1,962,578
Day-use	9,635,292	10,428,592	10,839,305	11,415,962	10,820,288
Grand Total	31,442,599	37,860,116	34,503,125	43,267,974	38,089,691

Table 4-4. Jobs Generated by Activity and Lodging Class

	Alternative A	Alternative B No Action	Alternative C	Alternative D	Alternative E Proposed Action
Motorized Tour Boating	209	322	194	419	307
Private Floating	1	8	8	8	8
Commercial Floating	1	36	36	36	36
Bank Angling	2	2	2	2	2
Private Boat Angling	0	1	1	1	1
Commercial Boat Angling	13	10	10	19	10
Miscellaneous Activity	8	8	8	8	8
Rogue River Day Only	253	262	278	286	274
Rogue River Camping	41	42	42	44	42
Rogue River Lodging	28	28	28	28	28
Camping Total	176	202	197	221	202
Hotel/Motel	373	470	385	547	463
Friends/ Relatives	83	102	100	114	104
Day-use	535	579	602	634	601
Grand Total	1,723	2,072	1,891	2,367	2,086

Chapter 5

Consultation and Coordination

Introduction

The Ministry of Education and the Ministry of Health have been working closely together to ensure that the health care system is able to meet the needs of the population. This chapter provides an overview of the current situation and outlines the key areas for consultation and coordination.

The following is a list of the key areas for consultation and coordination:

- Health care services
- Public health
- Community health
- Health promotion
- Health equity

List of Preparers

Name	Position/Title	Organization
Health Services		
Mr. John Smith	Manager, Health Services	Health Services Department
Ms. Jane Doe	Manager, Health Services	Health Services Department
Mr. John Smith	Manager, Health Services	Health Services Department
Ms. Jane Doe	Manager, Health Services	Health Services Department
Public Health		
Mr. John Smith	Manager, Public Health	Public Health Department
Ms. Jane Doe	Manager, Public Health	Public Health Department
Mr. John Smith	Manager, Public Health	Public Health Department
Ms. Jane Doe	Manager, Public Health	Public Health Department
Community Health		
Mr. John Smith	Manager, Community Health	Community Health Department
Ms. Jane Doe	Manager, Community Health	Community Health Department
Mr. John Smith	Manager, Community Health	Community Health Department
Ms. Jane Doe	Manager, Community Health	Community Health Department
Health Promotion		
Mr. John Smith	Manager, Health Promotion	Health Promotion Department
Ms. Jane Doe	Manager, Health Promotion	Health Promotion Department
Mr. John Smith	Manager, Health Promotion	Health Promotion Department
Ms. Jane Doe	Manager, Health Promotion	Health Promotion Department
Health Equity		
Mr. John Smith	Manager, Health Equity	Health Equity Department
Ms. Jane Doe	Manager, Health Equity	Health Equity Department
Mr. John Smith	Manager, Health Equity	Health Equity Department
Ms. Jane Doe	Manager, Health Equity	Health Equity Department

Summary of Changes

- The “List of Preparers” section has been updated.
- The “List of Agencies and Organizations Contacted” section has been updated.
- The “BLM Public Outreach” section has been updated to include January 1999 to January 2002.
- The “Public Involvement Following Publication of the RAMP/DEIS” section has been added.
- The “Comments and Responses” section has been added.

Introduction

The Hellgate Recreation Area Management Plan/Final Environmental Impact Statement (RAMP/FEIS) was prepared by an interdisciplinary team of specialists from the BLM Medford District Office and the BLM Oregon State Office. Writing of the Draft began in early 1995; however, comprehensive scoping and research studies began in 1991. The planning process involved many steps with public participation, as well as consultation and coordination with many agencies and organizations.

The following is a list of people involved in the preparation of this RAMP/EIS, a list of agencies and organizations contacted during its preparation and to whom a copy of the RAMP/EIS has been sent, and a summary of public involvement to date.

List of Preparers

Name	Responsibilities/Positions	Qualifications
BLM Management		
Mary Smelcer	Management Guidance/ Acting District Manager	B.S., Forest Management, Southern Illinois University. BLM, 3 years; USFS, 22 years.
Abbie Jossie	Management Guidance/ Grants Pass Field Manager	B.S., Wildlife Management, University of Nevada Reno. Private industry, 12 years; University of Nevada Reno, 2 years; BLM, 15 years.
Chris Dent	Management Guidance/ Rogue River Manager	B.S., Recreation Resource Management, Oregon State University. USFS, 16 years; BLM, 2 years.
RAMP Team		
Louise Austermuehle	Permit Administration, Visitor Use, Visitor Use Projections/ Forestry Technician	A.A., Recreation, Lassen College. USFS, 9 years; BLM, 16 years.

Name	Responsibilities/Positions	Qualifications
John Bethea	Human Waste Management, Recreation Facilities/ Forestry Technician	22 years in recreation and wastewater management. Wastewater Management Certification, State of Oregon. BLM, 26 years.
Rebecca Brown	Recreation Sites, Graphic Design, Mapping, Document Production Coordination/Forestry Technician	B.S., Wildlife Management, Humboldt State University. City of Alhambra, 3 years; USFS, 2 years; BLM, 19 years.
Steve Castro-Shrader	Law Enforcement, Permit Compliance/ District Law Enforcement Ranger	B.S., Parks and Recreation Management, California State University at Hayward. NPS, 15 years; BLM, 14 years.
Cori Cooper	Planning Team Leader/ Outdoor Recreation Planner	A.S., Administrative Office Management; Business Education, Southern Oregon State College. BLM, 10 years.
Mathew Craddock	Lands and Minerals/ Realty Specialist	B.S., Forest Recreation, Iowa State University. BLM, 21 years.
Leslie Frewing-Runyon	Socioeconomics and State Office Guidance/Western Oregon Planner and Regional Economist	B.A., Economics, Willamette University. BLM, 12 years.
Karen Gillespie	Public Information (News Releases)/ District Public Affairs Officer	B.A., Environmental Studies, Sonoma State University; M.A., Recreation Administration, Chico State University. California State Government, 5 years; BLM, 12 years.
Jon Hall	Transportation/ Engineer Technician	B.S., Civil Engineering, Oregon State University. BLM, 3 years.
Doug Henry	NEPA Coordinator	B.S., Forestry, University of California; M.S., Forest Ecology, University of Minnesota. BLM, 28 years.
Dale Johnson	Fisheries Resources/ Fisheries Biologist	B.S., Fisheries Science, Oregon State University. Environmental Consulting, 3 years; EPA, 1 year; Bonneville Power Administration, 10 years; BLM, 12 years.
Jeanne Klein	Recreation Opportunity Spectrum, Content Analysis/ Outdoor Recreation Planner	B.S., Biology, Augustana College; M.S., Forestry, Southern Illinois University. BLM, 11 years.
Jim Leffmann	Visual Resources, ORVs, Nonmotorized Boaters, Recreational Anglers (impacts, attitudes, and visitor capacity)/ District Recreation Lead	B.S., Law Enforcement, Southern Oregon State College; M.A., Outdoor Recreation Planning, Oregon State University. City of Portland, 3 years; USFS, 1 year; BLM, 24 years.
Dave Maurer	Soils Resources, Riparian- Wetlands, Water Resources/ Soil Scientist-Hydrologist	B.S., Soil Science, California Polytechnic University. BLM, 12 years.

Name	Responsibilities/Positions	Qualifications
Linda Mazzu	Botany, Sensitive Plants/Botanist	B.S., Recreation and Park Management, Pennsylvania State University; M.S., Natural Resources (Vegetation Ecology), Humboldt State University. NPS, 13 years; BLM, 5 years.
Jim McConnell	Technical Coordinator/ District Environmental Coordinator	B.S., Forest Management, Colorado State University. USFS, 4 years; BLM, 21 years.
Ann Ramage	Cultural Resources/ District Archeologist	B.A., Anthropology, University of New Mexico; M.B.A., Eastern New Mexico University. BLM, 25 years.
Eric Schoblom	Program Coordination, Land Use, Boating Safety, Special Boating Events, Motorized Boating, Scenic Easements, MTB Visitors, MTB Permits, Budget Projections, Sound Development Scenarios/ Associate Manager Rogue River Program	B.S., Forestry, Oregon State University. USFS, 3 years; BLM, 27 years.
Dave Taylor	Recreational Mining/Geologist	B.A., Geology/Geography, University of Montana. NPS, 1 year; BLM, 13 years.
Brad Washa	Air Quality, Wildfire/ Fuels Management Specialist	B.S., Natural Resources/Political Science, University of Wisconsin - Stevens Point; M.S., Wildland Fire Science, Colorado State University. The Nature Conservancy, 2 years; NPS, 3 years; USFS, 6 years; BLM, 3 years.
Leslie Welch	Wildlife/Wildlife Biologist	B.S., Wildlife Management, Louisiana Tech University. Peace Corps, 4 years; USFS, 9 years; BLM, 3 years.
Robyn Wicks	Trails, Document Production Coordination, Writer-Editor/ Park Ranger	B.S., Resource Recreation Management, Oregon State University. Oregon State Parks, 11 years; BLM, 11 years.
Past Team Members		
Bruce Albert	Law Enforcement, Permit Compliance/ District Law Enforcement Ranger	B.S., Wildlife Management, Humboldt State University. Law enforcement, 26 years.
Kurt Austermann	Public Information (News Releases)/ District Public Affairs Officer	B.S., Journalism, Boston University. Radio/Television News Director, Newspaper Correspondent, 10 years; USFS, 11 years; BLM, 15 years.
Harold Belisle	Management Guidance/ Grants Pass Area Manager	B.S., Forestry and Recreation Management, Colorado State University; M.S., Planning and Park Administration, Texas Tech University. BLM, 20 years.

Name	Responsibilities/Positions	Qualifications
Bill Bentley	Contract Administration for Studies Program/ Contracting Officer	U.S. Fish and Wildlife, 10 years; Bureau of Reclamation, 3 years; BLM, 17 years.
Bob Bessey	Fisheries Resources/ Fisheries Biologist	M.S., Fisheries, University of Washington. Private Industry, 4 years; BLM, 24 years.
Gerard Capps	Geology/Geologist	B.S., Geology, University of California. Exploration geologist, 4 years; BLM, 22 years.
Karen Gillespie	Management Guidance/ Acting Rogue River Manager	B.A., Environmental Studies, Sonoma State University; M.A., Recreation Administration, Chico State University. California State Government, 5 years; BLM, 12 years.
Ted Hass	Soils Resources, Riparian- Wetlands, Water Resources/ Soil Scientist-Hydrologist	B.S., Soil Science, California Polytechnic University. Soil Conservation Service, 1.5 years; BLM, 21 years.
David A. Jones	Management Guidance/ Medford District Manager	B.S., Forestry and Range Management, Colorado State University. BLM, 37 years.
Barbara Kinney	Document Production/ Office Automation Assistant	A.A., Computer Programming, Florida Technical College. Private industry, 4 years; DOD, 12 years; BLM, 2.5 years.
Robert Korfhage	Management Guidance/ Grants Pass Field Manager	B.S., Range Management; M.S., Range/Wildlife Habitat Management, Washington State University. BLM, 30 years.
Ron Laber	Hazardous Materials/ Hazardous Materials Coordinator	Studied Forest Road Design, Montana State University; Hazardous Materials Management, Wayne State University; Computer Science, Southern Oregon State College. Private industry, 15 years; BLM, 26 years.
Jim Leffmann	Management Guidance/ Rogue River Manager	B.S., Law Enforcement, Southern Oregon State College; M.A., Outdoor Recreation Planning, Oregon State University. City of Portland, 3 years; USFS, 1 year; BLM, 24 years.
Doug Lindsey	Transportation Systems/ Lead Civil Engineering Technician	B.S., Civil Engineering Technology, Oregon Institute of Technology. Federal Highway Administration, 2 years; BLM, 20 years.
Pete Littlefield	Public Involvement Analysis; Visitor Use; Data Base Consultation, Design, and Analysis/Computer Assistant	BLM, 14 years.
Gretchen Lloyd	Management Guidance/ Grants Pass Area Manager	Environmental Science, University of Virginia. USFS, 3 years; BLM, 22 years.

Name	Responsibilities/Positions	Qualifications
John McGlothlin	Geographic Information Systems (GIS), Automated Resources Data (ARD) (mapping and calculations), Proof Reader/ GIS Coordinator	B.S., Forestry, University of Montana. BLM, 23 years.
Jason Miniken	Recreation Maintenance, Human Waste Management, Visitor Use, Sign Interpretation/Park Ranger	B.S., Recreation Resource Management, Oregon State University. BLM, 6 years.
Tom Murphy	Air Quality, Wildfire/Fuels Management Specialist	B.S., Natural Resource Management, Rutgers University. USFS, 1 year; BLM, 20 years.
Bob Murray	Timber Management/Forester	B.S., Forest Land Management, Northern Arizona University. BLM, 20 years.
Cheryl Nelson	Document Production/ Office Automation Clerk	B.A., Technical Writing, Southern Oregon University. BLM, 4 years.
Cliff Oakley	Wildlife/Wildlife Biologist	B.S., Biology, Southern Oregon University; M.S., Biology, Southern Oregon University. BLM, 22 years.
Christi Oliver	IDT Member/Student Career Experience Program–Outdoor Recreation Planner	Pursuing a B.S., Forest Recreation Resources/Fisheries and Wildlife, Oregon State University. BLM, 4 months.
John Prendergast	Silviculture/Supervisory Forester	B.S., Forest Management, West Virginia University. Georgia-Pacific Corporation, 1 year; USFS, 3 years; BLM, 16 years.
Joan Seevers	Botany, Sensitive Plants/Botanist	B.S., General Studies-Science/ Math, Southern Oregon State College. BLM, 23 years.
Jerry Walker	Recreation Facilities/ Maintenance Worker	Sumter Trade School, Sumter, South Carolina. Private industry, 5 years; BLM, 30 years.
Mike Walker	Plan and EIS Coordination, Public Involvement Analysis, Recreational Rafters, Consultation and Coordination, Sound/ Outdoor Recreation Planner	B.S., Natural Resources; M.S., Resource Geography, Oregon State University. County government, 3 years; BLM, 30 years.
Kate Winthrop	Cultural Resources/ District Archaeologist	M.A., Ancient Studies, University of Minnesota; Ph.D., Anthropology, University of Oregon. Contract Archaeologist, 10 years; BLM, 8 years.
Ron Wenker	Management Guidance/ Medford District Manager	B.S., Range Management, California State University. BLM, 28 years.

List of Agencies and Organizations Contacted

The RAMP/FEIS team or supporting individuals in the Oregon State Office contacted or received input from the following organizations during development of the RAMP/FEIS.

Federal Agencies

- USDA, Forest Service
- USDI, Bureau of Indian Affairs
- USDI, Bureau of Land Management
- USDI, Bureau of Mines
- USDI, Bureau of Reclamation
- USDI, Geologic Survey
- USDI, National Park Service
- US Army Corps of Engineers
- US Coast Guard
- US Environmental Protection Agency
- US House of Representatives
- US Senate
- Federal Energy Regulatory Commission

State of Oregon Agencies

- Department of Environmental Quality
- Department of Fish and Wildlife
- Department of Forestry
- Division of State Lands
- Economic and Community Development Department
- Land Conservation and Development Department
- Office of the Governor
- Parks and Recreation Department
- State Historic Preservation Office
- State Marine Board
- State Police
- Water Resources Department

Local Government and other Governmental Bodies

- City of Grants Pass
- Jackson County Library
- Josephine County Board of Commissioners
- Josephine County, District Attorney
- Josephine County Forestry
- Josephine County Library
- Josephine County Planning Office
- Josephine County Parks
- Josephine County Sheriff
- Oregon House of Representatives
- Oregon State Senate
- Rogue Valley Council of Governments
- Southern Oregon University Library
- University of Oregon Library

Organizations

America Outdoors
American Rivers
American Whitewater
Association of O and C Counties
Center for Biological Diversity
Chamber of Medford/Jackson County
Friends of Living Oregon Waters
Grants Pass and Josephine County Chamber of Commerce
Grants Pass River Racers
Grants Pass Tourism Advisory Committee
Grants Pass Visitor & Convention Bureau
Headwaters
Izaak Walton League of America
Josephine County Bikeways Committee
Klamath-Siskiyou Wildlands Center
Middle Rogue Steelhead Chapter, Trout Unlimited
National Organization for River Sports
Nature Conservancy
Neighbors of Hussey Lane
Northwest Rafter Association, Grants Pass Chapter
Oregon Coastal Defense
Oregon Guides and Packers Association
Oregon Natural Resources Council
Oregon Whitewater Association
RASCAL
River Network
Riverhawks
Rogue River Guides Association
Sequoia Paddling Club
Sierra Club
Siskiyou Chapter National Audubon Society
Siskiyou Project
Siskiyou Regional Education Project
Siskiyou Trail Riders
Southern Oregon Powerboat Association
Southern Oregon Regional Economic Development
Southern Oregon Timber Industry Association
The Research Group
Waldo Mining District
Wild Earth Advocates
Wildlife Images
Willamette Kayak and Canoe Club

Businesses

Armadillo Mining Shop
Auto Tech
Carney's Fishing Adventures
ECHO: The Wilderness Company
Enlightened Expeditions
Galice Resort
Hellgate Jetboat Excursions, Inc.

Morrison's Rogue River Lodge
NEPA Design Group
Outdoor Adventure River Specialists, Inc.
Orange Torpedo Trips
Outdoor Adventures
Pringle's Guide Service
Rainman Excursions
River Trips Unlimited
Rogue Excursions
Rogue River Raft Trips
Rogue Wilderness, Inc.
Specialty Guide Service
Sundance River Center
Valley Steel and Fabrication

Public Involvement

Scoping Processes

Extensive public involvement has occurred since the Hellgate planning process began in 1991. Many members of the public participated in these scoping efforts.

Scoping had three phases: (1) an early effort from May 1991 through December 1992 when the approach to revise the plan was through an environmental assessment (EA), (2) a formal environmental impact statement (EIS) scoping effort from October 1993 through January 1994, and (3) an additional informal scoping effort from May through September 1994 when the issues and alternatives were refined and shared with the public.

Environmental Assessment Scoping: May 28, 1991 through December 1992

The BLM initiated the process to replace the Hellgate RAMP through an EA process May 28, 1991 with the publication and distribution of a comprehensive preplan analysis document (USDI, BLM, MDO, GPRA 1991). The preplan analysis document identified: the boundaries and the objectives for the Hellgate Recreation Area derived from previous planning efforts; documented the scope, complexity, and requirements for the planning effort, including possible inventory requirements; initiated internal and external coordination, including the identification of possible stakeholders and partners; identified a BLM interdisciplinary team; and a schedule to replace the river plan. The preplan analysis document was sent to approximately 400 people over a 4 month period from May through August 1991.

Interviews, Meetings, and Newspaper Articles

Numerous articles were published in local and regional papers covering the planning process. In addition, open houses, informal meetings, personal interviews, and telephone conversations with interested organizations and individuals occurred throughout this process. Approximately 3,200 responses were received from interest groups across the country during the three scoping efforts.

BLM representatives conducted 21 personal interviews with individuals concerned with management of the Rogue River.

Presentations were made by BLM representatives at public meetings to explain specific or general elements of the planning process and/or to discuss possible issues. This included 16 formal presentations to organizations and civic groups about the planning effort to revise the Hellgate RAMP.

A broad range of newspaper articles published during the 20-month scoping period were gathered and analyzed for topics of concern to the public. Two-hundred and thirty-seven (237) articles were collected, which either were entirely about the Hellgate Recreation Area or were about issues directly relating to the management of the section. Most articles were published locally in the Grants Pass Daily Courier, Ashland Daily Tidings, or the Medford Mail Tribune.

Demographics

BLM received 2,701 written responses. These written responses were from 5 categories of respondents: pre-scoping responses (164 or 6 percent), general scoping responses (212 or 8 percent), Sneak Preview survey form responses (56 or 2 percent), MTB survey form responses (2,248 or 83 percent), and personal interviews (21 or 1 percent).

Most of the respondents were U.S. citizens (99 percent): out-of-state (43 percent), local (39 percent), and in-state, but not local (17 percent). Foreign visitors, representatives of national organizations and individuals not identifying an origin represented one percent.

The majority (93 percent) of the respondents were individuals followed by individuals associated with a business, government, or organization (5 percent). Data was unavailable on affiliation for two percent of the responses. Most responses were form letters (87 percent) and individual letters (11 percent). Interviews, other, and unaffiliated represented the remaining 2 percent of the responses.

User/Visitor Attitudes

Public opinion as recorded and analyzed provided a substantial amount of information from the recreation user and/or visitor. Carrying capacity and allocation represented 93 percent of the identified issues. The next 5 issues of concern represented another 5 percent of the identified issues: fishing and/or fisheries, socioeconomic benefits, erosion, safety, and noise. The 2,701 responses provided opinions about possible issues supported by approximately 50,000 reasons (i.e., supporting rationale for issue identification).

These issues and reasons translated into several areas of concern: possible impacts to river resources from visitor use, health and safety concerns, socioeconomic benefits, motorized versus nonmotorized boating, and the social carrying capacity of the river. Social carrying capacity relates to the question of the increased visitor use altering or degrading the recreational experience. The MTB service was clearly identified as the major point of controversy among users of the Hellgate Recreation Area. The common interests of all users and/or visitors were the opportunity to view scenery and wildlife, to be in a natural setting, and to enjoy the river. The following are summary descriptions of the feelings expressed by the five categories of users and/or visitors.

Prescoping Comments

Over two-thirds of the respondents identified MTBs as the reason there was a carrying capacity and/or an allocation issue. These respondents either wanted MTB services eliminated, restricted, or managed to reduce perceived impacts. Approximately 20 percent of the respondents were concerned with a variety of other topics. Another 5 percent of the respondents were supportive of the MTB business as a component of the tourism industry and as a valuable contributor to the region's

economic stability. They did not support restrictions to MTB operations and/or change to management of the MTB service. The last 5 percent were concerned with the possible pass-through and no-anchor zones the Oregon State Marine Board was considering as management tools.

General Scoping Comments

One-third (32 percent) of the respondents identified MTB services as the reason there was a carrying capacity and/or an allocation issue. These respondents either wanted MTB services eliminated, restricted, or managed to reduce perceived impacts. Almost another one-third (26 percent) were supportive of the MTB business as a component of the tourism industry and as a valuable contributor to the region's economic stability. They did not support restrictions and/or change to management of the MTB services. Almost one-half (42 percent) of the respondents were concerned with a variety of other topics such as fisheries, safety, land use, erosion, or noise.

Sneak Preview Comments

The large majority of the respondents commenting with the Sneak Preview forms felt they were being impacted by MTB operations. Over 70 percent of the commenters felt that MTBs created the following impacts: noise degrading peace and solitude, erosion destroying spawning habitat, disruption of fishing pleasure and rafting experiences, and unsafe situations from boat operations. Approximately 25 percent of the respondents did not feel that any of the above identified impacts were occurring. They were supportive of MTB services as a component of the tourism industry.

The respondents were more evenly divided in terms of their recommended management solutions with 43 percent feeling the MTB services should be eliminated, 41 percent feeling that MTB services should be reduced, and 13 percent feeling the MTB services should be maintained. No recommendations were provided by 3 percent of the respondents.

Motorized Tour Boat Comments

Almost all (approximately 98 percent) of the MTB respondents commented that they enjoyed a rewarding experience while visiting the Rogue River on a commercial jet boat. They supported the MTB business and said the service it provided to the public should be maintained at its present level. They felt the river should be available to both motorized and nonmotorized boaters. The respondents thought, in general, that the river should be managed to provide a variety of visitor use opportunities (e.g., a concept of multiple-use).

Many, including the young, elderly, and handicapped, felt this particular mode of visiting the river was their only opportunity for experiencing the river resources, and that the expense of the trip was reasonable. They appreciated the educational and interpretive aspects of their trip through the information provided by the boat operator concerning historical and wildlife resources.

The large majority of these visitors felt safe during their visit to the Rogue River and felt the MTBs were operated in a safe and courteous manner in relation to the other visitors to the river. Overall, few respondents felt any ecological or resource impacts were present on the river.

Personal Interview Comments

This group identified a broad range of issues. Physical and biological impacts were identified, along with social and economic issues.

Notice of Intent to Prepare Environmental Impact Statement

The BLM published a notice of intent in the Federal Register on October 1, 1993, which described the intent to prepare the EIS, the need for the action, the planning issues, and a range of alternatives. The BLM's environmental analysis approach evolved from an EA to an EIS effort due to the intense public controversy surrounding the issues.

Public responses on the process to revise the Hellgate Recreation Area Management Plan were analyzed for the 7-month period from October 1993 through April 1994. Eighty responses were received.

Issues and Alternatives Document

The BLM published and distributed an issues and alternatives document May 9, 1994. This document refined the issues and alternatives previously identified in the preplan analysis and notice of intent. The deadline for the public comment period was extended from July 15, 1994 through September 1994.

Public responses on the process to revise the river plan for the Hellgate Recreation Area were analyzed for the 5-month period from May through September 1994. Two-hundred and forty-five responses were received.

Public Involvement Following Publication of the RAMP/DEIS

In November 2000, the BLM released the Hellgate Recreation Area Management Plan/Draft Environmental Impact Statement (RAMP/DEIS) for a 90-day public review and comment period. Approximately 625 Hellgate RAMP/DEIS documents were mailed to parties that had expressed an interest in receiving the document.

During the comment period, the BLM hosted two open houses and met with numerous user groups and landowners to discuss the RAMP/DEIS. Letters and e-mails were received from 146 respondents and an additional 168 comments were recorded at open houses and meetings. Comments were received from the states of California, Maine, Michigan, Nevada, Oregon, and Washington. In addition, 197 form letters were received.

Public Meetings

The Medford BLM Rogue River Program hosted two open houses to solicit input regarding the Hellgate RAMP/DEIS: one in Grants Pass and one in Medford. The open houses were attended by approximately 80 people and produced approximately 114 comments. Several other meetings and discussions were held with interested people, groups, and organizations, as requested. These meetings generated another 54 comments.

Demographics

The BLM received form letters, e-mails, letters, comment cards, and phone calls from 340 respondents: 197 form letters (58 percent), 79 e-mails (23 percent), 56 letters (16 percent), 6 comment cards (2 percent), and 2 phone calls (1 percent).

Comments were received from 7 states: 292 from Oregon (86 percent); 8 from California (2 percent); 4 from Washington (1 percent); 1 each from Idaho, Maine, Michigan, and Nevada (1 percent total); and 32 from unidentified locations (10 percent). Comment letters were received from 108 respondents in Jackson and Josephine counties. Local letters constituted 35 percent of the letters received from identified locations.

Comment letters to the BLM came from: individuals (308 or 91 percent), organizations (18 or 5 percent), businesses (10 or 3 percent), local government (2 or .5 percent), and federal government (2 or .5 percent).

Respondents Attitudes

All comments were analyzed for content and this information was recorded in a database. The comments centered on the following issues: motorized boating, soils and erosion, user fees and permits, visitor services, and recreational opportunities.

Motorized Boating Comments

Many comments indicated the number of motorized tour boat (MTB) trips per day should be reduced from the current level of 19 trips per day. Others considered the current use level is appropriate for the river and provides a significant economic benefit to the area. Others said the MTBs provide river access to recreationists (elderly and physically challenged) who might not otherwise be capable or willing to experience the river environment by using other types of craft.

Some comments also expressed concern over the potential safety threat of MTBs to other on-river users, stating the MTB operators drive too fast and do not slow down at boat ramps, swimming areas, or for boat and bank anglers and other small watercraft.

Soils and Erosion Comments

Some comments suggested jetboat wakes impact the riverbanks and fisheries resource, causing increased sediment action and damage to landowner's property, while others maintained jetboats cause minimal disturbance.

User Fees and Permits Comments

The majority of comments did not support user fees of any kind for the private nonmotorized boaters. Some thought there should be no limits to commercial motorized fishing boat permits, commenting that the use of motorized boats by private users is higher than the number of licensed guides.

Visitor Services Comments

Many comments did not support a new visitor center at the Rand administrative site because of concerns that it could impact the scenery and increase road traffic and congestion in the area. Some comments acknowledged the need for expanded administrative services at Rand, but believed a new visitor center should be built in the City of Grants Pass. Continued issuance of float permits for the wild section at the Smullin Visitor Center at Rand is supported.

A number of comments supported the expansion of the BLM river education program to include interpretation on river use guidelines, litter, vandalism, and the natural and cultural history of the area.

Recreational Opportunities Comments

Many comments advocated improved boat ramps to reduce the crowding that occurs at put-in and take-out sites. Others did not want developments of any kind. Many comments wanted current campsites, day-use area, and trails maintained and developed, especially river access for the bank angler. Recreational mining was generally supported and comments asked that this be addressed further in the FEIS.

BLM Public Outreach

Environmental Assessment Scoping: May 28, 1991 through December 1992

Date	Action	Approximate Number of People Involved
05/91	BLM News Release on intent to revise Hellgate Recreation Area Plan dated May 29, 1991, "BLM seek river plan comments"	Distribution list
05/91 - 08/91	Mailing of Preplan Analysis Document to Interested Public	400
05/91	BLM Briefing for BLM Advisory Council	10
06/91	Letter of Invitation from BLM Area Manager to be Involved in River Planning Process	1,400
09/91	BLM Presentation for Grants Pass and Josephine County Chamber of Commerce Board	10
09/91	BLM Presentation for North Valley Businesses 15 Association	
10/91	BLM Briefing for Middle Rogue Chapter, Association of Northwest Steelheaders	10
11/91	BLM Briefing for Josephine County Water Resources Advisory Committee	10
11/91	BLM Briefing for State of Oregon Rogue River Planning Coordination Group	5
12/91	BLM Briefing for Middle Rogue Chapter, Association of Northwest Steelheaders	10
10/92	Mailing of Visitor Use Inventory Background Paper for Revising Hellgate RAMP	90
01/92	BLM Presentation for Grants Pass Lions Club	30

Chapter 5 – Consultation and Coordination

01/92	BLM Presentation for Grants Pass Chapter, Northwest Rafting Association	30
02/92	BLM Presentation for Rogue River Guides	25
03/92	BLM Presentation at Annual Oregon Guides and Conference	70
03/92	BLM Briefing for Annual “Wild” Section Outfitters’ Meeting	25
03/92	BLM Briefing for Middle Rogue Chapter, Association of Northwest Steelheaders	10
04/92	BLM Presentation for Grants Pass Nordic Ski Club	20
04/92	BLM Briefing for Middle Rogue Chapter, Association of Northwest Steelheaders	10
06/92	BLM Presentation for Siskiyou Audubon Society	30
07/92	BLM Briefing for Galice/Grave Creek Small Miners Work Group Meeting	15
09/92	BLM Presentation for Eagle Point Lions Club	10
09/92	BLM Briefing for BLM Advisory Council	10
12/92	BLM Briefing for American River Council	2

Informal Environmental Assessment Scoping: January 1993 through September 1994

01/93	Mailing of <i>Rogue River Studies Program Background Paper for Revising Hellgate RAMP</i>	700
01/93	Briefing for Grants Pass City Council	10
01/93	Briefing for Grants Pass Chapter, Northwest Rafting Association	20
02/93	Briefing for State of Oregon Rogue River Planning Coordination Group	10
02/93 - 08/93	Mailing of Fishery Resources Background Paper for Revising Hellgate RAMP	60
03/93	BLM Briefing for Annual “Wild” Section Outfitters’ Meeting	25
03/93	BLM Presentation for Middle Rogue Chapter, Association of Northwest Steelheaders	40

03/93	BLM Briefing for Josephine County Planning Commission	5
03/93 - 07/93	Mailing of Scoping Document Background Paper for Revising Hellgate RAMP	240
04/93 - 05/94	Mailing of BLM Contracted Visitor Attitude Study conducted by Oregon State University	240
05/93	BLM Briefing for Middle Rogue Chapter, Association of Northwest Steelheaders	12
05/93	BLM Briefing for Grants Pass City Council	10
08/93	Briefing for Josephine County Ad Hoc Noise Committee	8
09/93 - 10/93	Mailing of Preparation Plan Which Included Detailed Information of Notice of Intent to Prepare an EIS	500
09/93 - 06/94	Mailing of Economics Effects Contract Study conducted by Economic Strategies Northwest	130
09/93	BLM News Release on notice of intent dated September 13, 1994, "BLM seeks Rogue River comments"	Distribution list

Environmental Impact Statement Scoping: October 1, 1993 through January 31, 1994

10/93	Notice of Intent published in <i>Federal Register</i> October 1, 1993	Distribution list
10/93	BLM Briefing for State of Oregon Rogue River Planning Coordination Group	20
10/93	BLM Briefing for Josephine County Agency Representatives	10
01/94	BLM Briefing for Middle Rogue Chapter, Association of Trout Unlimited	12
01/94	BLM Presentation at Annual Oregon Guides and Packers Conference	60
01/94 - 06/94	Mailing of <i>Agency Responsibility Background Paper for Revising the Hellgate RAMP</i>	170
02/94	BLM Presentation for Merlin/North Valley Improvement Association	25
03/94	BLM Presentation for Grants Pass Lion's Club	30

03/94	BLM Briefing for Grants Pass City Council Meeting	15
03/94	BLM Presentation for Rogue Gateway Rotary Club	40
04/94	BLM Panel Presentation for Second Annual Northwest River Runner's Conference	40

Issues and Alternatives Document: May 9 through September 1994

05/94	BLM News Release dated May 2, 1994, "Rogue River planners seek public's help"	Distribution list
05/94	Mailing of Issues and Alternatives Document	900
05/94	BLM Briefing for Josephine County Rural Planning Commission, May 23, 1994	5
05/94	BLM Panel Representation for Grants Pass and Josephine County Chamber of Commerce	40
06/94	BLM Paid Advertisements Announcing Open Houses Ashland Daily Tidings, Grants Pass Daily Courier, and the Mail Tribune	Newspapers' distribution lists
06/94	BLM Open House on Issues and Alternatives June 9, 1994 in Medford, Oregon	3
06/94	BLM Open House on Issues and Alternatives June 13, 1994 in Grants Pass, Oregon	35
06/94	BLM Briefing for Josephine County Rural Planning Commission, June 20, 1994	6
06/94	Mailing of Juvenile Salmonids Contracted Study conducted by Oregon Department of Fish and Wildlife	60
06/94	BLM Briefing for BLM Retiree's Tour	40
06/94	BLM Briefing for Grants Pass Active Club Officers	2
07/94	BLM Briefing for Josephine County Commissioners	2
07/94	BLM Briefing for Josephine County Rural Planning Commission, July 8, 1994 river float	7
07/94	Mailing of Erosion Contracted Study conducted by Oregon State University	180
08/94	BLM Briefing for Josephine County Rural Planning Commission, August 1, 1994	4
08/94	BLM Briefing for Josephine County Rural Planning Commission, August 15, 1994	7
09/94	Mailing of <i>Motorized Tour Boat Background Paper for revising the Hellgate RAMP</i>	117

On-going Public Involvement Efforts: September 30, 1994 through January 1999

01/95	Mailing of <i>Sound Inventory Background Paper for revising the Hellgate RAMP</i>	180
01/95	Mailing of Contracted Study of Attitudes of Land Owners by Southern Oregon State University	180
01/95	BLM Briefing for Merlin/North Valley Improvement Association, January 26, 1995	30
08/95	Mailing of Contracted Boating Safety and Conflicts Study by Water Resources Consulting	250
12/95	Mailing of <i>Fall Chinook Impact Background Paper for revising the Hellgate RAMP</i>	40
12/95	Mailing of Final Juvenile Salmonids Contracted Study conducted by Oregon Department of Fish and Wildlife	15
12/95	Mailing of Final Visitor Use Background Paper for revising Hellgate RAMP	10
10/95	BLM Presentation for the American Institute of Hydrology	100
01/99	Mailing of Rogue River Currents - Planning Update	2,000

Hellgate RAMP/DEIS: January 1999 through January 2002

09/00	Smullin Visitor Center EA	158
11/00	Mailing of the Hellgate RAMP/DEIS	625
01/01	BLM Paid Advertisements Announcing Open Houses Ashland Daily Tidings, Grants Pass Daily Courier, and the Medford Mail Tribune	Newspaper's distribution lists
01/01	BLM Open House on the Hellgate RAMP/DEIS January 18, 2001 in Grants Pass, Oregon	64
01/01	BLM Open House on the Hellgate RAMP/DEIS January 24, 2001 in Medford, Oregon	16
04/01	BLM Briefing for Rogue River Kiwanis April 18, 2001 in Rogue River, Oregon	12
04/01	Mailing of Rogue River Currents - Second Planning Update	2,000
05/01	BLM Presentation for Grants Pass Rotary Club May 9, 2001 in Grants Pass, Oregon	175

Comments and Responses

Purpose and Need

Comment: The Preferred Alternative does not accomplish the purpose and need for the action stated in the RAMP.

Response: The statement of purpose and need has been expanded in the RAMP/FEIS. The range of alternatives provides a varying mix of themes and options that would accomplish the purpose and need.

Coordination with Other Agencies

Comment: The plan should be coordinated with Josephine County Parks to avoid duplicating facilities and competing for the same customers.

Response: BLM and Josephine County Parks are partners in the management of the Hellgate Recreation Area. Coordination occurred with Josephine County Parks in development of the RAMP/FEIS.

Range of Alternatives

Comment: The restricted range of alternatives evaluated in the RAMP/DEIS circumvents the notion of informed decision-making on a range of alternatives. The range of alternatives is insufficient. The CEQ requirements to design the alternatives to sharply reflect the issues and provide a clear basis for choice has not been met.

Response: An agency is not required to address all possible alternatives. The range of alternatives provides a varying mix of themes and proposals that accomplish the purpose and need, and enhance and maintain the ORVs in the planning area. The range of alternatives address the issues identified through the scoping process and have been revised based upon public comments received during the review process. Nothing has come to light that provides a substantive basis for broadening or changing the range of alternatives included in the RAMP/DEIS.

NEPA Requirements

Comment: Table S-1, Summary of Issues by Alternatives, fails to consider all significant planning issues.

Response: Table S-1 has been expanded to include the significant planning issues identified in Chapter 2 of the FEIS.

Comment: The management plan should describe how the NEPA process should be incorporated into decisions for site-specific projects and special use permits.

Response: The purpose of the RAMP/DEIS is not to provide the site-specific analysis for decisions regarding future on-the-ground projects. Additional NEPA analysis would be conducted, as needed, prior to pursuing the site-specific projects mentioned in the RAMP/FEIS. Public involvement opportunities would be provided, as required. Language reflecting this has been added to the RAMP/FEIS to remind the reader.

The RAMP/DEIS does include specific analysis for some special recreation permits (SRPs), and where sufficient, will provide the basis for issuing those permits including regulatory stipulations. Where the RAMP/DEIS does not provide specific analysis for proposed SRPs, additional NEPA analysis would be conducted, as needed, prior to issuing the permit. Public involvement opportunities would be provided, as required. Language reflecting this has been added to the RAMP/FEIS to remind the reader.

- Comment: It is recommended that 40 CFR 1502.22 be followed if the information relevant to reasonably foreseeable significant adverse impacts cannot be obtained because the overall costs of obtaining it are exorbitant or the means to obtain it are not known.
- Response: The RAMP/FEIS more clearly states where there are areas of incomplete or unavailable information in accordance with 40 CFR 1502.22.
- Comment: The RAMP/DEIS does not comply with the procedural requirements of NEPA.
- Response: As noted in the responses to the more specific comments regarding perceived NEPA deficiencies, these have been remedied in the FEIS.
- Comment: The RAMP/FEIS must require that an environmental analysis pursuant to NEPA be conducted for every special use permit.
- Response: Prior to any decision to issue a special use permit, the application will be appropriately analyzed pursuant to NEPA requirements.
- Comment: A Supplemental EIS (SEIS) should be prepared after addressing all of the comments and issues raised. The DEIS does not meet NEPA standards because it does not have an index and this should be corrected in a Supplemental EIS.
- Response: The RAMP/FEIS includes consideration of the comments received on the DEIS. An index has been added in the RAMP/FEIS. The changes that have been made are not substantial enough to warrant a supplemental DEIS.
- Comment: Chapter 2 does not satisfy NEPA standards, especially with regard to providing a summary comparison of the alternatives.
- Response: The CEQ regulations allow variation in organization of an EIS as long as the content is provided. Comparative tables are included in Chapter 2, Alternatives, and the Executive Summary.
- Comment: The DEIS does not meet NEPA requirements based on the following:
- common basis/baseline for comparing and stating effects.
 - inconsistent definition of short term vs. long term.
 - acknowledging and dealing with incomplete and unavailable information.
 - impact methodology.
 - logic in presenting evidence and making findings/conclusions about the evidence (conclusionary statements, impacts without assessments).
 - treatment of monitoring doesn't meet NEPA standards.
- Response: All of the above were addressed in the RAMP/FEIS.

Affected Environment

- Comment: The Affected Environment section of the RAMP/DEIS is weak and inadequate. It does not meet the NEPA standard requiring succinct discussions of only the relevant affected environment elements.
- Response: Additional affected environment discussions have, where deemed appropriate, been added in the RAMP/FEIS. This section has been expanded and updated for the RAMP/FEIS. The content contains what resource specialists view as being relevant and important.
- Comment: Information describing existing motorized boaters' conditions that are significantly affected needs a summary section relating to the Environmental Consequences section.
- Response: This has been added to the appropriate sections.

Environmental Consequences

- Comment: The RAMP/DEIS is not consistent in assumptions used about short-term versus long-term impacts.
- Response: Short term is defined in the glossary of the RAMP/DEIS as, "The time period during which the revised Hellgate Recreation Area Management Plan will be implemented; assumed to be 10 years." Long term is defined in the glossary of the RAMP/DEIS as, "The period starting 10 years beyond implementation of the revised Hellgate Recreation Area Management Plan." The RAMP/FEIS was checked for consistency throughout the document and corrected where necessary when short-term and long-term impacts were discussed.
- Comment: It would be wise to consider the short-term and long-term impacts to visitor use in the "Environmental Consequences" chapter.
- Response: Additional discussions about impacts to visitor use have been included in the RAMP/FEIS.
- Comment: There are conclusionary statements about the effects of alternatives, but no significance determinations, nor any documentation of short- or long-term impacts, direct, indirect or cumulative impacts.
- Response: The Environmental Consequences section has been rewritten.
- Comment: The RAMP/DEIS does not meet the CEQ standard of providing a full discussion on the significant environmental effects. It does not include a sufficient impact methodology to support the conclusions. The BLM should develop and document more coherent impact methodologies. A full and fair discussion of significant environmental impacts that inform decision makers and the public of the reasonable alternatives, which would avoid or minimize adverse impacts or enhance the quality of the human environment should be analyzed and documented.
- Response: Additional discussions about impacts and the impact methodologies used in the analysis of the effects, have been included in the RAMP/FEIS.
- Comment: The impact analysis has many references to comparing the effects of Alternatives A-D to the Preferred Alternative. It should be comparing effects to the affected environment conditions.
- Response: The No Action alternative provides the baseline against which the impacts of other alternatives

are compared. The FEIS Environmental Consequences discussion has clarified this relationship.

Comment: The RAMP/DEIS does not include measures to mitigate identified impacts as required. The alternatives discussions and environmental consequences discussions sections are totally silent about mitigating measures. The mitigation references should be omitted if they are described in Chapter 2.

Response: Measures that mitigate the identified impacts will help explain how each alternative will effect the resource, and therefore, have been included in the RAMP/FEIS.

Comment: The fisheries analysis in the Environmental Consequences section, including Appendix G, Fisheries Factors and Assumptions, comparing alternatives to 1991 levels or current management is not in compliance with NEPA.

Response: Alternative B, or current management, provides the baseline against which the impacts of other alternatives are compared. The FEIS Environmental Consequences discussion has clarified this relationship.

Comment: The Environmental Consequences chapter includes many conclusions without a complete and objective evaluation of significant environmental elements. It does not meet the standard of providing a full and fair discussion that informs decision makers and the public of significant environmental impacts. Chapter 4 is inadequate and needs to be rewritten.

Response: Additional environmental consequences discussions describing the basis upon which the conclusions have been made have, where appropriate, been added in the RAMP/FEIS.

Comment: All impacts should be compared to the Affected Environment chapter, not to other alternatives.

Response: Alternative B shows current management conditions on the Rogue. This is the appropriate baseline for comparisons. The Affected Environment also describes current conditions.

Comment: The Effects on Campers and Effects on Other Recreational Users sections of Chapter 4 in the RAMP/DEIS compares Alternatives A-D to the Preferred Alternative. Alternatives A-D should be compared to the affected environmental conditions or Alternative B.

Response: These sections were rewritten for the RAMP/FEIS to make Alternative B the baseline for comparison of alternatives.

Comment: The BLM needs methods to analyze impacts to campers and other recreational users of Alternatives A-E.

Response: The methods are contained in the Effects on Campers and Day-Use Visitors, Effects on Recreational Mining, and Effects on Trail Users sections of Chapter 4 (Environmental Consequences) in the RAMP/FEIS.

Comment: The Effects on Campers and Effects on Other Recreational Users sections of Chapter 4 (Environmental Consequences) in the RAMP/DEIS do not focus on significant environmental issues.

Response: These sections have been rewritten in the RAMP/FEIS.

Comment: The BLM has not adequately addressed the environmental consequences of developing proposed facilities.

Response: The purpose of the RAMP/DEIS is not to provide the site-specific analysis for decisions regarding future on-the-ground projects. Additional NEPA analysis would be conducted, as needed, prior to pursuing the site-specific projects mentioned in the RAMP/FEIS. Facilities have been proposed that are recommended for development based on their physical characteristics and attractiveness to recreationists. More detailed analysis on facility/site development will be addressed in the future. Proposed facility development may or may not occur as details of feasibility, or lack thereof, surface with site-specific analysis. In many cases, development is intended to mitigate environmental consequences and visitor health and safety concerns due to use of river areas without facilities (i.e., toilets, trash cans, parking, and signs).

Comment: We believe descriptions should be no longer than is necessary to understand the effects of the alternatives, and that data and analyses should be commensurate with the importance of the impact.

Response: The content is what resource specialists view as being relevant and important.

Comment: It is assumed that the ROD will be signed by 2002-2003, which would make the time frame for short-term impacts to be from around 2002 to 2012 and the time frame for long-term impacts to be after 2012.

Response: Short term is defined in the glossary of the RAMP/DEIS as, "The time period during which the revised Hellgate Recreation Area Management Plan will be implemented; assumed to be 10 years." Long term is defined in the glossary of the RAMP/DEIS as, "The period starting 10 years beyond implementation of the revised Hellgate Recreation Area Management Plan."

Comment: The impact analysis used a large amount of documentation to repeat elements of the alternatives documented in Chapter 2, Alternatives.

Response: The Environmental Consequences section has been rewritten.

Monitoring Plan

Comment: The BLM needs to identify methods for monitoring and evaluation of recreation site conditions (set standards for limits of acceptable change) and for informing management when limits are exceeded. A detailed monitoring plan should be included in the analysis.

Response: A resource monitoring plan is included in the RAMP/FEIS.

Outstandingly Remarkable Values

Comment: There are significant concerns with how ORVs are applied and selected for the Hellgate Recreation Area under the National Wild and Scenic Rivers Act. How were the ORV's identified? Why aren't other resource values identified as ORVs? ORVs that the BLM failed to identify are: cultural values, wildlife values, hydrologic values, and ecological values. They satisfy the criteria for ORVs in addition to natural scenic values, fisheries, and recreation.

These missing ORVs are evident from discussions in the 1972 plan, the RAMP itself, and from public input. Have these ORV elements as well as all the ORV elements been coordinated with the US Forest Service? The identification of ORVs should be subject to public comment.

Response: In 1968, the Rogue River was one of the original eight rivers that received "instant" designation under the Wild and Scenic Rivers Act. Because of this instant designation, the ORVs were not identified in any designating legislation. The need to identify the ORVs led the managing

agencies to rely on congressional records to determine what the legislation intended. Memorandum to Files, 8351.2 (11785) ORV2 outlines the legislative history of the Wild and Scenic Rivers Act of 1968, and includes language from legislative discussions relative to the Rogue River and its ORVs.

The outstandingly remarkable values for the Rogue River, as recognized by Congress (HR 1917 September 24, 1968 and HR 1623 July 3, 1968); as described in the *Master Plan for the Rogue River Component of the National Wild and Scenic Rivers System* (USDI 1969); and as described in the 1972 Plan, the *Rogue National Wild and Scenic River, Oregon: Notice of Revised Development and Management Plan* (Federal Register Vol. 37, No. 131, 13408-13416) include fish, water-based recreation, and the natural scenic features along the river corridor. Other river-related values that are important, but were not considered outstandingly remarkable at the time include cultural and wildlife resources.

Comment: Within the values already denoted, the BLM fails to identify natural quiet as part of the natural setting of the scenic value of the important research values of the river corridor.

Response: Natural quiet (or the natural ambient sound conditions) has only recently been recognized by the National Park Service. It is usually a resource considered in more primitive areas such as national parks or wildernesses, not in a recreational river section designated under the Wild and Scenic Rivers Act.

Comment: Are the three listed ORVs of equal value? How does the BLM decide which ORV has precedence over other ORVs in terms of protection? The BLM should document and present the criteria by which one ORV will be protected over another ORV. This should be documented in a supplemental DEIS.

Response: As stated in section 10(a) of the Wild and Scenic Rivers Act, “. . . primary emphasis shall be given to protecting its aesthetic, scenic, historic, archaeological, and scientific features. Management plans for any such component may establish varying degrees of intensity for its protection and development, based on the special attributes of the area.” Actions must protect all Outstandingly Remarkable Values; one ORV does not take precedence over another ORV. When values are in conflict with each other, the net effect to ORVs must be beneficial. The RAMP/FEIS includes a range of alternatives that provides for emphasis of different ORVs in each alternative. A supplemental DEIS is not necessary.

Comment: How do you justify the Preferred Alternative in light of the requirement to “protect and enhance” ORVs?

Response: Section 10(a) of the WSRA states that: “Each component of the National Wild and Scenic Rivers System shall be administered in such a manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration, primary emphasis shall be given to protecting its aesthetic, scenic, historic, archaeological, and scientific features. Management plans for any such component may establish varying degrees of intensity for its protection and development, based on the special attributes of the area.”

This section is interpreted by the Secretaries of the Interior and Agriculture as meaning that all designated river areas, regardless of classification, will be protected and/or enhanced and not degraded. Each action alternative, including the proposed, was developed on the basis of protecting the ORVs.

Comment: Listing jet boating as an ORV threatens all other ORVs since all other listed ORVs are diminished by the presence of jet boat activity or motorized tour boats at present levels of use. How

did the BLM decide that the MTB ORV had less priority than the experience of anglers by watercraft and the nonmotorized float boater ORV?

Response: MTB use and nonmotorized floating are not ORVs; they are components of the recreation ORV.

Use Limits

In the BLM's responses, the term "Use Limits" has replaced the term "Carrying Capacity."

Comment: How can the BLM make decisions without the identification of carrying capacities? The BLM needs to identify the carrying capacity for all types of use. We take exception to the statement that the Preferred Alternative established carrying capacities for each use. Motorized boating has many limits documented in the alternatives chapter, but no carrying capacity analysis. Nonmotorized float boaters have a carrying capacity analysis documented in the DEIS. Other users such as boat anglers, bank anglers, hikers, campers, and day use visitors do not have any carrying capacity analysis documented in the DEIS. The Hellgate RAMP/DEIS should evaluate current and potential recreation use and identify a carrying capacity for all recreational boating use (i.e., motorized boating, nonmotorized boating, and nonmotorized boat angling) and adjacent land activities (i.e., camping, trail use, and day use areas), which were identified as significant issues.

Response: There is no dispute regarding the need for establishment of use limits for all types of use. These determinations were made within the context of a monitoring plan, which functions as a key management tool for assessment of all resource conditions, values, and quality. The monitoring plan addresses use limits. It contains a process to determine indicator conditions for each type of recreation and resource use. The process will provide managers with a set of options to effectively administer mitigation measures. Control tools and methods of protection and enhancement were outlined for all resource values including, but not limited to, the ORVs in the planning area.

A review of current management of the other seven rivers designated along with the Rogue in 1968, found that use limits are established in an assortment of methods, each of which has its merits and weaknesses. Although use limit determinations are not common, those that have been established were generally driven by a need to address a user perception of overcrowding and dissatisfaction.

It appears imperative to approach the use limit situation as a concern that merits a detailed and prudent study approach that would be anticipatory in nature rather than an effort in reactive management.

Development of the process for use limit determinations should involve all recreation users and all management entities to ensure a balanced approach is obtained. Once use limits are reached, an amendment to this plan would occur.

Comment: How can you base your decisions on old data? The carrying capacity should be set at a reasonable number that is reflective of current use, not use from 1991.

Response: The Hellgate RAMP study program began in 1991. Field studies were contracted to compile accurate baseline data on actual use of the Hellgate Recreation Area. The baseline data gathered that year has served as a benchmark for monitoring use in the following years. Use trends for all types of recreation activities have remained relatively static since that time as perceived by BLM field personnel. Significant changes in use patterns have not been noted through informal observation.

To reestablish substantive data on current conditions relative to use levels, BLM staff conducted field verification visitor counts during the month of August 2001. Staff monitored and recorded use levels at launch points and counted water craft and passengers in the Applegate and Dunn reaches. These counts were used to evaluate data used in the DEIS and to amend use assumptions as appropriate.

Periodic monitoring of all use levels has been included as a component of a resource monitoring plan in the RAMP/FEIS. Resource monitoring is a key component of recreation and natural resource management.

Comment: We object to controls on nonmotorized craft.

Response: Control of private float craft is considered as a management option when it is the only means available to mitigate resource damage or degradation or, in the case of a Wild and Scenic river, when the ORVs are jeopardized. Such options are reserved for use when the management goals cannot be achieved in any other manner. Passive methods, such as user education and promotion of low impact use ethics, are the preferred tools for enhancement and protection of the available recreation opportunities in the Hellgate Recreation Area.

As part of future management, ongoing monitoring of all categories of visitor use would be initiated. An integral part of this monitoring is the continual assessment of recreation impacts and user perceptions of the planning area and utilizing a survey method as developed and implemented in 1993 (Shindler and Shelby 1993). These assessments would serve to indicate the level of management effort needed to preserve the quality of the recreation experience.

Comment: Please consider the management directions outlined in the “Wild and Scenic Rivers Guidelines” published in the Federal Register on Sept. 7, 1982. Carrying capacity is defined as the quantity of recreation use, which an area can sustain without adverse impact on the outstandingly remarkable values, and free-flowing character of the river area, the quality of recreation experience, and public health and safety.

Response: As part of future management, ongoing monitoring of all categories of visitor use would be initiated. An integral part of this monitoring is the continual assessment of recreation impacts and user perceptions of the planning area and utilizing a survey method as developed and implemented in 1993 (Shindler and Shelby 1993). These assessments would serve to indicate the level of management effort needed to preserve the quality of the recreation experience. Studies will be made during preparation of the management plan and periodically thereafter to determine the quantity and mixture of recreation and other public use which can be permitted without adverse impact on the resource values of the river area. The carrying capacity being redefined may produce different results than the existing data. Overall recreation levels would not be regulated unless use limits are reached.

Air Resources

Comment: The following statements provide little information to the reader: “Measurements of air pollutant levels within the planning area have never been recorded. Potential effects will be analyzed based on the amount of pollution sources expected to be present in the area compared to known source amounts and pollution levels for Grants Pass, Oregon.”

The statement, “Pollutants of concern include: fine particulate (PM10), carbon monoxide, visibility, and light scattering which pertains to visibility and PM10” is not supported with a rationale or impact methodology. Is there an issue that would trigger 40 CFR 1502.22 (CEQ regulations regarding incomplete or unavailable information)?

Response: The first statement is meant to inform the reader that increases in traffic flow of motor vehicles and boats, indicates an increase in emissions. Overall comparisons are made using Grants Pass, Oregon data, the closest area where data is available for vehicle emissions. The limited amount of overall vehicle and boat traffic in the planning area has been determined to have a minimal impact on local or regional air quality (see Chapter 4, Effects on Air Quality Common to All Alternatives).

The second statement is based on no effect in emissions from the high use of motor vehicles in Grants Pass. This leads to the conclusion that much lower level of boat use in the HRA will have a small influence in total emissions.

Comment: Use of maximum average daily traffic projections as an indicator to project air pollution from motor vehicles is reasonable and documented comparison analysis is reasonable.

Response: This comment is a statement. No response is necessary.

Fire

Comment: “Fire prevention and suppression planning cannot adequately address these areas [undeveloped and informal camping and trail use]” provides little usable information for the reader. What are the impacts?

Response: As indicated in paragraph one of the Effects on Fire section, “actions that increase the dispersion of visitor use over a wider area increases the wildfire risk.” Furthermore, “human activities that have the greatest influence on wildfire risk include camping, hiking, and use of off-highway vehicles (OHVs).” A stand alone wildfire prevention plan, outside the scope of this document, would be required to fully evaluate the level of current risk. Fire prevention and suppression activities are currently contracted out to Oregon Department of Forestry. Special protection measures are in place and additional back country patrols are conducted under the suppression contract for this area of the Medford District.

Comment: How does this type of information, that the risk of wildfire would increase or remain at current levels, help the decision maker(s) and the public understand the significance of the impacts?

Response: As the level and intensity of public use increases along with the type of activity, impacts to the risk of wildfire changes. This increase in public use affects the level of risk and the threat of a wildland fire start. In developing levels of risk, subjective analysis based upon professional judgement are used in addition to past wildfire cause and occurrence. In Alternative D, for example, the alternative calls for the maximum level of watercraft and visitor use and, hence, the highest level of risk due to an increased level of exposure from increased use and the type of use. In addition, new remote sites (float-in only) that are planned would minimize rapid suppression opportunities and increase the opportunity for larger size fires to develop.

Comment: Concern exists about the possibility of fires originating from the OK Corral. Some chainsaw work followed by machine piling and line building with fall pile burning would improve the chances for stopping a fire from going up the hill through the Green Tree Subdivision.

Response: This is outside the scope of the FEIS. Fire prevention and suppression activities are currently contracted out to Oregon Department of Forestry. The Grants Pass Resource Area will develop a Fuels Hazard Reduction Plan. This plan would cover the Hellgate Recreation portion of the National Wild and Scenic Rogue River and would center on recommended fuels treatments.

Soils

Comment: Are no-wake zones required under the Preferred Alternative? What is a no-wake zone? Does this mean motor boats are off-plane or required to move less than a certain speed? How are no-wakes measured? Objectives are referenced, but not defined; what are the objectives?

Response: No-wake zones are a part of the Proposed Action (see Table 2-2). “No-wake zone” is an area where boats are to proceed off plane and at such a speed so that a minimal wake is generated.

“No-wake” is boating terminology as defined by the Oregon State Marine Board in OAR 250-10-025:

- No person shall operate a boat on the waters of this state in excess of a slow no wake, maximum 5 mph speed within 200 feet of a boat ramp, marina with six or more vessels; a floating home moorage with six or more structures; or persons working at water level.
- Section (1) of this rule does not apply to commercial vessels or vessels engaged in navigation on rivers where a speed in excess of 5 mph is needed to ensure safe passage.

The objectives of the no-wake zones in the RAMP/FEIS are to minimize soil erosion in erosion sensitive areas and to prevent boat wakes from disturbing docks, swimmers, and other craft.

Comment: Do all the designated erosion sensitive zones meet the MTB off-plane depth requirement of three feet of water at least 20 feet wide? What if the off-plane requirements are not satisfied?

Response: During monitoring, erosion sensitive areas will be inspected to insure they are currently susceptible to wake-caused erosion. If they are found to be susceptible, they must meet jet boat operational criteria for no-wakes, (i.e., length and depth requirements must be met). MTBs will not be required to come off of plane in areas where this is not possible.

Other measures to control erosion would also be considered on a case-by-case basis (Klingeman et al. 1993).

Comment: The erosion zones should be identified and their characteristics documented along with the specific management actions. Soil and bank stability analysis is a critical concern that needs further study. What is the monitoring plan for erosion zones? A monitoring plan should be developed for the four major erosion areas.

Response: Erosion sensitive areas were identified in the RAMP/DEIS. Discrepancies between the erosion sensitive areas identified on the map and those identified in the text were corrected in the RAMP/FEIS. Proposed management actions (no-wake zones) are as described in each alternative. The characteristics of the erosion zones and the river in the area of the erosion zones were identified in the *Rogue River Erosion/Deposition Study* (Klingeman et al. 1993).

Comment: The erosion sensitive areas in the Preferred Alternative do not adequately address erosion along the entire reach of the Hellgate section. If the Preferred Alternative continues to allow jetboat use, it should include limits that allow no wake throughout the Hellgate Recreation Area.

Response: A full field inventory of both river banks in the Hellgate Recreation Area was conducted and actively eroding sites were analyzed. It was found that five percent of the banks (2.4 miles of the total 53.7 miles) in the planning area showed signs of erosion. Of the total length of banks showing erosion, approximately one-fourth of the erosion was attributed to “boat waves”, that is, waves caused by motorized water craft. The sites where motorized boat waves had some causal effect in bank erosion are those sites considered for no-wake zones.

Because of the maneuvering and navigating characteristics of jet boats, they are not always able to come off plane. Hence in some areas of the river, they will be at speed and on plane throwing a wake. In such cases, other methods for mitigating boat wave-caused erosion will be considered after further monitoring. Requiring a continuous no wake zone would effectively eliminate MTBs from the river which would adversely effect those visitors.

Comment: The Bybee Hole and OK Corral erosion areas do not have any severe or limited erosion category identified for them in the BLM erosion study (Klingeman et al. 1993). What standards were used to identify them as major erosion sensitive areas?

Response: These areas were omitted during the inventory portion of the Klingeman study. The new sites, Bybee Hole and OK Corral (renamed Jumpoff Joe) areas, were brought to the attention of the BLM by concerned citizens after completion of the erosion study. The sites were inspected by the BLM's Soil Scientist and were determined to have erosive soil as per the standards in the *Rogue River Erosion/Deposition Study* (Klingeman et al. 1993). The Jumpoff Joe site will be monitored to determine if boat wakes cause erosion at this site.

Comment: The BLM needs to add a no-wake zone to the Jumpoff Joe Creek area.

Response: The Proposed Action and Alternatives C and D include a no-wake zone in the Jumpoff Joe Creek area.

Comment: The State does not name portions of rivers after commercial establishments, especially when these establishments may be environmentally disturbing these very stretches of rivers. Therefore, the BLM should rename the portion of the Rogue River identified in Map 2-1, called OK Corral, in order to respect the same criteria as the State. The for-profit jetboats that deliver patrons to the for-profit OK Corral cause a muddying of the subject reach of water on river left. It is clear that this is indeed an erosion sensitive area. The BLM should not advertise a commercial restaurant and reward eroders, but instead remove the OK Corral as a name for this stretch and more appropriately call it "Sanders" (for Sanders Creek on river left) or "Jumpoff Joe" (for Jumpoff Joe Creek on river right).

Response: The OK Corral erosion sensitive area has been renamed Jumpoff Joe in the RAMP/FEIS.

Comment: Is the 1,000 Rocks erosion area (not identified on Map 2-1) the same as the Bybee Hole erosion area identified on Map 2-1? What are the characteristics of the erosion zones and river in the area of the erosion zones? There is no information in the Soils Section of the Affected Environment.

Response: Bybee Hole is the correct name for the erosion area. Bybee Hole was not mentioned in the text, but it was identified in Map 2-1 of the DEIS. Bybee Hole has been fully included in the FEIS. The location of "1,000 Rocks," as mentioned in the Draft EIS, is unknown and has been removed from the FEIS. The characteristics of the erosion zones and the river in the area of the erosion zones were identified in the *Rogue River Erosion/Deposition Study* (Klingeman et al. 1993).

Comment: The following statement should be clarified: "Five percent of the total riverbank area has a severe or limited erosion category and are considered to be erosion sensitive areas" and its relationship to the information in the erosion study (Klingeman et al. 1993).

Response: The areas identified in the RAMP/DEIS as "limited" or "severe" are synonymous with the areas listed in the erosion study that showed "some" or "severe" erosion.

Comment: The criteria or standard used to determine that only four of the seven “significant” bank erosion areas identified in Table 8 of the erosion study (Klingeman et al. 1993) were erosion sensitive areas should be noted, especially since the affected statement for soils identifies that all seven are “. . . considered to be erosion sensitive areas.” The Soils section of the Affected Environment chapter should have an “Erosion Sensitive Areas” section that addresses our comments.

Response: Out of the seven significant bank erosion areas, only one (upper end of Brushy Chutes to RM 84.5) listed wave action as a primary cause of erosion. Five sites, including Brushy Chutes, were identified with wave action and wave scour as contributing causes. Of those, Table 9 (Klingeman et al. 1993) identified boat waves as causing an estimated 10 percent of the erosion in the Hellgate Bridge to lower Taylor Creek Bar area. This was not deemed substantial. Twenty to forty percent of the erosion at the remaining four sites was estimated to be caused by boat waves. These were determined to be “erosion sensitive” to boat waves and were selected for additional monitoring or “no-wake” zones. Chapter 3 addresses erosion within the planning area.

Comment: The Soils section in Chapter 3 should be rewritten in order for the decision makers and the public to better understand the cumulative impacts from floods, motorized boating, and foot traffic to the 5 percent of the riverbank that is susceptible to erosion. The decision makers and the public also need to understand the significance to riverbank erosion from the range of motorized boating and recreational developments provided for in the alternatives.

Response: The Soils section in Chapter 3 was rewritten for the RAMP/FEIS. The bank condition at the time of the study was the existing condition and thus part of the affected environment. Floods should not be considered part of the affected environment, since they are beyond the control of river management. The portion of riverbank that is susceptible to erosion may or may not respond to management actions.

Water

Comment: The RAMP/DEIS does not adequately address water quality or its Clean Water Act obligations and whether discharges from motorized boats degrade water quality or cause other adverse impacts to the river.

Response: The BLM responsibilities under the Clean Water Act are addressed in Chapter 3. The issue of water quality in relation to motorized boat discharges was not indicated as a concern during the scoping process. Boat motors and other mechanical parts are sealed from exposure to river water and there is no history of water quality problems linked to motorized boat discharge. The Oregon Department of Environmental Quality in its evaluation for 303(d), Water Quality Limited streams, found no indication of water quality impairment of beneficial uses caused by hydrocarbons in the subject portion of the Rogue River (Meyers 2001). Standard processes will occur should a petroleum spill take place.

Comment: The existing physical, chemical, and biological characteristics of the Almeda Mine drainage into the Rogue River should be described, including any other possible sources of pollution identified by the public.

Response: The EPA, DEQ, and BLM are investigating the discharge and its effects on the environment. Final results are not available at this time.

Comment: The Effects on Water section should be rewritten in order for the decision makers and the public to understand the cumulative effects to turbidity from all sources, especially motorized boating.

Response: The Klingeman et al. (1993) study addressed the relation of boat-caused impacts compared to other types of impacts on the bed and banks of the river. We do not have information from “all sources” at this time.

Riparian Areas, Wetlands, and Flood Plains

Comment: There is concern that recreational use will cause additional impacts to wetlands.

Response: Impacts to wetlands from recreational use have been included in the Environmental Consequences section of the RAMP/FEIS.

Comment: The EPA identified standards for describing wetlands and riparian areas. Are there any projects related to the alternatives (e.g., boat ramps, roads, trails, etc.) that potentially affect wetlands or riparian areas? Important maps in the Affected Environment chapter that are missing are those for wetlands and riparian areas. Maps for wetlands and riparian areas should be provided in the Affected Environment chapter.

Response: Mapping of wetlands and riparian areas is not available. The National Wetland Inventory, conducted by the US Army Corps of Engineers, has not yet covered the planning area. The purpose of the RAMP/DEIS is not to provide the site-specific analysis for decisions regarding future on-the-ground projects. Additional NEPA analysis would be conducted, as needed, prior to pursuing the site-specific projects mentioned in the RAMP/FEIS. Each project would be analyzed for effects on wetlands and/or riparian areas.

Comment: The RAMP/EIS should demonstrate compliance with the BLM MDO RMP’s Aquatic Conservation Strategy and riparian reserve objectives; and EPA’s documented concerns, “If projects tiered off the management plan call for disturbances within a riparian area, an assessment of the impacts on riparian functions and values should be provided in the management plan. Measures for avoidance and mitigation for riparian areas should be thoroughly discussed. Possible effects on riparian areas include impacts on water quality protection and improvement, habitat for aquatic and terrestrial life, channel and bank stability, flood storage, ground water recharge and discharge, sources of primary production, and aesthetics.”

Response: The Aquatic Conservation Strategy is addressed in Chapter 1 and in the Effects to Wetlands, Riparian Areas, and Flood Plains section in the RAMP/FEIS. Where appropriate, discussions about riparian area impacts and possible mitigations have also been included. The ACS was addressed in Appendix C and Chapter 1 of the RAMP/DEIS.

Fisheries

Comment: What are the impacts of the larger MTB to riverbanks and spawning beds? Jetboats are causing sediment release and erosion, causing property damage to those who own riverside property, and adversely affecting the threatened chinook salmon runs. The sediment release is but one of the many causes for the decline of fish runs each passing year, which needs to be addressed.

Response: Within the planning area, motorized boats have impacted about 0.5 miles of 53.7 total miles of river bank (or 1.12 percent) (Klingeman et al. 1993). However, boat waves are not the primary causative agents of erosion. The primary causative factor was exposure of erosive banks to heavy currents during the winter high water. Erosion areas do not adversely effect chinook salmon. The amount of sediment eroding into the river is inconsequential compared to the volume of water in the Rogue River. Research and professional observation has determined there are no major impacts to spawning beds or riverbanks caused by the larger MTBs, as long

as MTB activity is stopped when there is the potential for harm and harassment of fall chinook during all life stages. Field observation indicates natural floodwaters deposit and move around more substantial amounts of soil than the cumulative action of motorized boats. The fact that the fall chinook fishery has maintained a good population level over the long term is evidence of no adverse effect from sedimentation, either natural or caused by people.

Comment: Thousands of commercial trips have taken place over the years into the recreational section and fish have not been observed moving out of the deep water into the declared spawning sites during the MTB operating season, however, MTBs navigate these spawning areas at a depth of one foot or better. Commercial boats generally operate in the deepest and fastest flowing part of the river.

Response: BLM's Special Status Species Policy 6840 restricts MTB operation during the fall chinook spawning season.

Comment: A cumulative impact analysis should be developed for estimating egg mortality in affected portions of spawning areas by motorized traffic in a supplemental NEPA document.

Response: In order to avoid impacts to chinook salmon eggs, BLM's Special Status Species Policy 6840 restricts MTB operation during the fall chinook spawning season. The amount of use by other motorized boats is small.

Comment: The spawning area guidelines in Alternative C could be implemented. This would best address the objective to "minimize" disturbance to salmon populations. Furthermore, it would be a step towards achieving the stated goal in the RAMP/DEIS to have "uninhibited" fall chinook spawning and rearing.

Response: Alternative C recommends no motorized use in the thirteen identified spawning areas when spawning occurs. All alternatives will be considered when the BLM forms the final Proposed Action for the Record of Decision.

Comment: What is the normal water depth of MTBs over spawning areas; when are the MTBs at 7-10 inches or less; and how much (percentage) of the spawning areas are impacted by MTBs at levels 7-10 inches or less? When are the MTBs more than 10 inches and how much of the spawning areas have water depths of more than 10 inches and are not impacted by MTBs? The normal water depth of MTBs over spawning areas should be described in the "Affected Environment" section.

Response: BLM Policy 6840 restricts MTB operation during the fall chinook spawning season.

Comment: Please explain the discrepancies between the spawning areas listed in the text (page 125) and those identified on Map 3-1 in the RAMP/DEIS. Middleton's Riffle and Weatherby Riffle identified on Map 3-1 are not listed in the text. The Jumpoff Joe Riffle spawning area identified in the text is not on the map. Other spawning areas appear to be lumped together on the map, but separate in the text. What are the identified spawning areas and how were they inventoried? Is there another study or inventory that identifies the methodology, criteria, and/or standards by which the spawning areas were identified? The BLM should post signs at the spawning areas.

Response: Corrections in the text and on the maps were made in the RAMP/FEIS. Middleton's Riffle is not within the Hellgate Recreation Area, so it is not included in the list. Areas "lumped together" on the map were too close together to be shown separately due to map scale. All thirteen spawning areas, as opposed to the originally planned four spawning areas, have been included in the RAMP/FEIS.

The BLM has conducted monitoring of the spawning sites since 1991 and maintains the major spawning areas are still the same. BLM staff floats the river and relates field observations to aerial photos. Comparisons are made based on year to year observations. The BLM would pursue posting spawning areas as part of the monitoring plan.

Comment: The BLM should provide its inventory methodology of fall chinook spawning for all the listed spawning areas (see Chapter 3 and Map 3-1), including its method of inventory (e.g., season of year, number of seasons inventoried, actual viewing days on river, boat, air, or secondary references, depth of water, size of spawning area, etc.) in a supplemental DEIS. This kind of information provides the public with a basis for understanding and judging the reliability of the impact analysis. In addition, if not available, it is recommended that BLM inventory the average water depths of spawning areas that boats pass over.

It is further recommended that BLM's fisheries factors and assumptions inventory the following items considered important in the Alaska study to egg mortality and adult behavior: substrate size, number of boat passes, size of boats, depth of water, depth of eggs in gravel, and size of streams.

Response: An impact methodology was added to the RAMP/FEIS. Comparing stream sizes in the Alaska study and the Rogue River is a moot point. The information derived from the Alaska study tells us the adverse effects caused from small watercraft. This information can be extrapolated to determine the effects relative to the larger MTBs and Rogue River water depths.

Comment: What is the difference between "spawning" and "spawning or pairing behavior" and why are the alternatives different? Why does a monitoring program treat different disturbance elements differently? The two fish studies and the RAMP/DEIS indicate slow moving rafts and drift boats as well as people on shore and anglers wading in the spawning beds adversely effect adult spawning behavior more than the passing of motor boats, especially if the boats were more than a few feet away from the spawning activity. What is the relationship between boat and bank angling and adverse effects to the health and viability of the fall chinook population in the planning area?

Response: Spawning means a pair of salmon actively digging a redd. Spawning or pairing behavior means a pair of salmon in courtship behavior preparing to dig a redd.

The BLM considers recreational activities other than MTB use to have an acceptable baseline adverse impact on the fall chinook fishery. The fishery has maintained its health and viability for decades with these levels of impacts from other activities.

Comment: The alternatives should be redesigned in a supplemental DEIS to take into account the disturbance to fall chinook spawning from all elements, not just motorized boating.

Response: The effects of different sources of disturbance are discussed in the FEIS. The relative impacts of each source of disturbance are not sufficient to warrant creating a series of new alternatives or a supplemental EIS.

Comment: The Alaska fish study and the BLM's juvenile fish study identified that disturbance to adult behavior during spawning can be caused by passing motor boats, slow moving rafts, people on shore, and people angling in the spawning areas. The DEIS identified essentially the same disturbances. The overall conclusion of the two studies and the DEIS is that slow moving rafts and drift boats, as well as people on shore and anglers wading in the spawning beds, adversely effect adult spawning behavior more than the passing of motor boats, especially if the boats were more than a few feet away from the spawning activity. We do not understand the criteria used to support the statement, "Disturbance to spawning behavior is insignificant from all

angling.” Why is it insignificant? The studies conclusions do not support the statement. However, if true, it would mean that disturbance to spawning behavior from motorized boats is also insignificant as the disturbance is less than that from rafts, drift boats, and people on shore and in the water; disturbance to spawning behavior becomes a non-issue.

Response: The BLM-supported juvenile study, *Effects of Boat Traffic on Juvenile Salmonids*, focused on juvenile fish, not adult spawning behavior. Motorized and nonmotorized boats and anglers can have an adverse effect on salmon eggs in the gravel, depending on the temporal and spatial conditions. Disturbance from MTBs to spawning and spawning behavior is not less than the disturbance from other activities. The BLM considers recreational activities other than MTB use to have an acceptable baseline adverse impact on the fall chinook fishery. The fishery has maintained its health and viability for decades with these levels of impacts from other activities. The BLM would address the effects of anglers wading in the spawning areas through an education program that may include signage, brochures, and/or flyers.

Comment: We agree that float craft and drift boats may produce adverse effects if the craft linger over spawning areas. However, we do not believe the issue is whether these craft group together during the winter, but during the potential spawning time. Is there a problem with individual or groups of float craft from August to September 15? Is there a problem with drift boat angling from August 15 through October 31? We also do not understand the distinction between single float craft or drift boats and groups and that there are different impacts. Is this assumption documented in a study somewhere? The statement that people in rafts tend to splash around, but that fish can avoid this slow moving action and it is not a major concern, is in conflict with the fish studies.

Response: This assumption is not documented in a study. Spawning generally does not occur from August through September 15. Drift boat numbers are typically not substantial. The magnitude of the impacts from float craft and drift boats is much lower than the impacts from MTBs. Float craft impacts to spawning gravel is not a concern.

Comment: Conclusions in the RAMP about the impact of motorboats on juvenile chinook salmon are misleading. A study of juvenile fish mortality caused by motorboat wave action at particular water depths has been overlooked (Horton, G. E. 1994. *Effects of jet boats on salmonid reproduction in Alaskan streams*. Masters thesis. Alaska Cooperative Fish and Wildlife Research Unit. University of Alaska, Fairbanks, AK). The obvious mitigation measure of jetboat horsepower and speed reductions are absent.

Response: Juvenile fish mortality and wave action were studied extensively. The BLM funded an Oregon Department of Fish and Wildlife study to evaluate the effects of boats on juvenile salmon and steelhead (Satterthwaite 1995). The results of the research indicate juvenile anadromous salmonid survival and distribution are not specifically hindered by motorized and nonmotorized boats and major changes in boating operations are not warranted. It also found that no juvenile salmon or steelhead stranding was caused by motor boats (Satterthwaite 1995). The Alaska study addressed only a portion of the issue as it did not evaluate the effects on juvenile or adult salmon, but only on eggs in the gravel.

Comment: “It is speculated that increased MTB use may have significant adverse effects on juvenile salmonids (notwithstanding past research results of MTB effects on juveniles) if operations were different than the 1991 levels and time of operation.” (Chapter 3, page 123). What is this speculation based upon?

The BLM’s study on the effects of MTBs on juveniles represents scientific evidence that should be considered (Satterthwaite 1995). The BLM acknowledged the study’s overall conclusion in the DEIS as: “The results of the research indicate juvenile anadromous salmonid survival and

distribution are not significantly hindered by motorized and nonmotorized boats and major changes in boating operations are not warranted” (Chapter 3, page 126). The results of the juvenile study are in conflict with the BLM’s speculation statement that increased MTB use may have significant adverse effects on juvenile salmonids. The study documented an increase in the adult spawning population during the last few decades during the same time that MTB traffic increased over 50 percent.

The BLM’s juvenile study should have merit as rationale for a change in the speculation statement that MTB use may have significant effects on juveniles, or rationale should be provided why the study’s conclusions are not credible and do not have value.

Response: The statement says increased boating use ‘may’ have an adverse effect in the future. This comment is merely a statement showing salmon populations are stable now yet may not be in the future under increased boat use.

Comment: Since the fisheries component of the Rogue River is not a disputed ORV, the best science available should be applied to any management actions taken by the Medford BLM. There is reliance by the BLM on the Missouri and Alaska jetboat studies, yet there was no comparison of the size of the study stream compared to the main stem of the Rogue River. What was the size of the study stream compared to the main stem of the Rogue River? Since water depth is important in determining the effects of jetboats on spawning areas, the normal water depth of MTBs over spawning areas should be described in the Affected Environment section. Treatment mortality was significant at water depths of 5 - 9 inches and non-significant at water depths of 9 - 12 inches. It appears that other major considerations in any impact methodology should consider substrate size, number of boat passes, size of boats, depth of water, depth of eggs in gravel, size of streams, and health of stock being potentially impacted.

Response: The primary threshold criteria is not movement of gravels and salmon eggs, but the harm or harassment of adult salmon trying to spawn. Under all alternatives, except Alternative D, MTBs would be prohibited from operating during the fall chinook spawning season. The Oregon/ Washington BLM’s Special Status Species Policy 6840 protects the fall chinook population from harm or harassment during all life stages. Under this policy, motorized tour boats will not be allowed to operate when there is potential to harm or harass fall chinook during courtship and spawning, when eggs are in the gravel, and when sac fry are present in the redds. Therefore, the size of the river is not a concern. The Missouri study is unpublished information. It is only referred to for background information in the Affected Environment section. Copies of the referenced studies can be obtained from the Medford District BLM.

Comment: The fisheries ORV is defined as salmon and steelhead populations and habitat. The RAMP does not mention the two species of sturgeon, several migratory forms of cutthroat trout, and other species that are present and significant to the river ecosystem.

Response: The RAMP does not focus on sturgeon and migratory cutthroat trout because these species are rarely seen in the planning area. The fisheries ORV, based on congressional record, centers on salmon and steelhead. Chinook salmon is the threshold or indicator species, which the BLM uses to monitor for fish. More information about other fish species has been added to the RAMP/FEIS.

Comment: We assume a healthy and viable population is the goal for the fisheries ORV as it relates to fall chinook. This should be described and documented in the DEIS, as it seems it is the indicator for estimating impacts. However, nowhere in the DEIS is it articulated what things should look like if there was no conflict between fisheries and visitor use. What is the fall chinook population goal, the end objective? We are trying to protect a fall chinook fishery resource, but to what level? We don’t think “We’ll know it when we see it” is going to work. We believe that

NEPA requires a disclosure to the public of what we are working toward, what is it going to look like when we get there? What is the “standard” (e.g., average or sustained population requirement, etc.) for a healthy and viable fall chinook fishery? What is the fall chinook population in the potential impact area (Grants Pass to Grave Creek) versus the planning area (Applegate to Grave Creek)? An “affected” fall chinook population should be described here for the existing management conditions and projected to 2007 just like for other estimates or better yet to 2012.

Response: At a minimum, the fall chinook goal is to maintain or enhance the existing run of fish in the RAMP area and Rogue Basin. Projections for annual fall chinook populations through 2007 are the same as the last ten years or more. The population is maintaining itself in the RAMP planning area and needs full protection so it is not compromised to the point of a downward turn.

Comment: The Effects on ORV - Fisheries section states that “All fish are affected . . .” What does the statement mean? Are all fish significantly affected? If not, the statement needs to be rewritten or eliminated.

Response: The statement has been rewritten to read, “Fall chinook are affected . . .”

Comment: The Effects on ORV - Fisheries section is in the “effects” chapter, but provides no documentation of the effects of any of the alternatives. What is its purpose?

Response: This section has been rewritten in the RAMP/FEIS.

Comment: The Draft EIS should not further reduce the commercial jetboat operating season from October 1 to September 15. The last half of September is peak time for tourism. If the recommended jetboat operating season reduction is to protect fall chinook salmon spawning, 90 percent of the salmon spawn after October 1. A restriction in the salmon sportfishing season would do much more to protect wild salmon than any two-week reduction in the jetboat season. In order for the MTB operator, as well as commercial fishing guides, to be able to plan, promote, and budget their business, they should be given firm dates of operation. An alternative could direct limits on speed and routes near spawning areas. The community relies on the tourism industry to support many jobs, especially since the timber industry is no longer a major part of the economy. For the fisheries monitoring program, we have heard that the parameter to be monitored is the number of fall chinook salmon spawning pairs. How many spawning pairs need to be identified before MTB traffic is eliminated during the last two weeks of September? How will the spawning pairs be identified (i.e., types of surveys and frequency of sampling)?

Response: The determination to prohibit MTB activity at any time is based on harm or harassment to eggs or to one pair of chinook in courtship. A monitoring plan is included in the FEIS. The BLM proposes to monitor the river to protect the spawners entering the RAMP planning area earlier than October 1. These fish need protection from adverse MTB impacts, especially when fish are trying to pair up and spawn. The BLM needs to provide for this potential situation. The comment about the sportfishing season may be valid, however, the BLM does not manage sport fishing and fish harvest. Fish harvest is managed by the Oregon Department of Fish and Wildlife. Also, total water craft use on the Rogue River peaks in July and August, then drops off in September (see Table 3-14).

Alternatives A, B, and the PA would allow the MTBs to operate from May 1 through September 30, providing monitoring indicates no spawning. Alternative D would set the season of use for MTBs at April 1 through October 31, with the stipulation that they avoid major spawning area or pass through them when salmon are spawning. A strict cut-off date of September 30 was considered for Alternative C, but it was thought that some flexibility based on the annual

variations of the onset of spawning would provide a better compromise and balance in the protection of both the fisheries and recreation ORVs. BLM's Special Status Species Policy 6840 restricts MTBs when any spawning behavior is observed.

Comment: Alternative D has a longer period when MTB use overlaps the spawning period and egg incubation period. Why is it important that MTB use overlaps the spawning period and egg incubation period? We have an overlap, but what are the impacts to the health and viability of the fall chinook population numbers? Why is a 26 percent increase in MTB activity in Alternative D during the critical time of fall chinook spawning important to the RAMP/DEIS conclusion that this would mean a very high potential for mortality to the fall chinook run? Why would the adverse effects from MTB traffic be less under the Preferred Alternative than in Alternative A? Why would the Preferred Alternative provide the most protection to the four major spawning areas during the MTB use period? This documented impact is conclusionary without any rationale. The design of alternatives eliminates the possible overlap in MTB traffic and chinook spawning, but what are the documented impacts?

Response: The Missouri and Alaska studies demonstrated a substantial disturbance to gravels from small motorized craft which could cause mortality to eggs. By applying the data from those studies to the larger MTBs, it is anticipated the MTBs would have a much greater impact on eggs in the gravel and sac fry in the redd. The Preferred Alternative provides the greatest degree of protection for fall chinook spawning because it eliminates MTB use when spawning is detected.

Comment: The *Fishery Resources Background Paper for revising the Hellgate Recreation Area Management Plan* documented that fall chinook fry emerge from the gravel in the Hellgate Recreation Area between late February and May (Bessey 1993). Motorized boating traffic is almost zero in February, March, and April. In the first two weeks of May the majority of motorized boating traffic is private motorized boating which, together with MTB traffic, is approximately one-fourth of the September traffic (see Table 3-12 and Figure 3-4). Is it valid to assume that most of the fry are gone from the redds in the first two weeks of May and only the last part of the population is still emerging?

Response: The numbers of fry emerging is irrelevant. The concern is that any fry are emerging. The BLM intends to prevent inordinate harm or harassment to fall chinook, as dictated by BLM's Special Status Species Policy 6840. Past studies indicate there should be no substantial harm to the population.

Comment: The present fall chinook salmon population descriptions should be expanded. All the Oregon Department of Fish and Wildlife annual data for fall chinook salmon populations should be included in this description, including carcass counts and population fluctuations. We understand from the bibliography that carcass count data was analyzed by BLM, but we do not understand how it was used. Why is the fall chinook population one of the healthiest fisheries in Oregon, if not the world (see Chapter 4)? Statements about fall chinook population fluctuations are misleading to the point of being in error in their lack of a comprehensive description. If they are true, how were they used to describe and project fall chinook salmon populations?

Response: The carcass count information helped to determine that 14 percent of chinook enter the Hellgate Recreation Area the last two weeks of September. The projected fall chinook population is not needed for our analysis.

Chinook salmon population projections are not needed to determine boating activity. This was clarified in the RAMP/FEIS. Presently, fall chinook populations are maintaining their levels with an adequate mix of boat use.

Comment: What criteria was used to decide that a significant increase in MTB traffic and visitor use would

occur in Alternative D? How is the projected increase in MTB traffic and visitor use used to estimate impacts to fall chinook?

Response: This has been explained in the RAMP/FEIS, Chapter 4.

Comment: Has there been an investigation into the effect of 360s by the jetboats on riverbanks and spawning beds?

Response: Studies did not specifically address the effects of 360 degree thrill power maneuvers. These maneuvers were considered to be a relatively minor portion of the study of impacts by boats and waves. Under BLM's Special Status Species Policy 6840, MTBs would be prohibited to operate during fall chinook spawning season. To protect riverbanks from boat wave caused erosion, thrill power maneuvers would be prohibited in designated erosion sensitive areas under Alternatives C, D, and the Preferred Alternative.

Comment: Generic statements are documented in the Hellgate RAMP/DEIS about the need for monitoring and evaluation and the need to conduct more specific monitoring and evaluation within the corridor for cultural, fisheries, and wildlife, but then little is documented about how the monitoring will be accomplished. Monitoring needs for other issues (e.g., safety sites of concern, erosion sensitive areas, traffic, etc.) were documented in the DEIS. There should be a discussion of monitoring for each resource category that was determined to be significant through the scoping process (i.e., motorized boating, nonmotorized float boating, nonmotorized boat angling, camping, trail system, and day use areas). Implementation of specific monitoring items should not be dependent upon funding. Monitoring statements are almost meaningless if not plainly adopted as part of the BLM preferred alternative and ROD.

Response: A monitoring plan is included in the RAMP/FEIS (see Appendix D).

Comment: The alternative analysis categorizes impacts by boat and bank anglers, private motorized boats, and MTBs. The impacts for four of the five alternatives are lower from MTBs than from private motorized boats, angling boats, and bank anglers. However, MTBs have season of use restrictions for all five alternatives, but private motorized boating has season of use restrictions for only Alternative C, private angling by boats has no season of use restrictions for any alternative, and bank anglers are not addressed as an issue in alternative design. No mitigation measures are identified that control or minimize adverse effects from boat and bank anglers and private motorized boats.

Response: The BLM considers recreational activities other than MTB use to have an acceptable baseline adverse impact on the fall chinook fishery. The fishery has maintained its health and viability for decades with these levels of impacts from other activities.

Comment: Table 4-1 is difficult to interpret by itself and because of its relationship to fishery impact methodology statements in other sections of the DEIS (i.e., Chapter 4, pages 198 - 199 and Appendix G, pages 371 - 376). We think Table 4-1 could be improved with a different kind of formatting for the footnotes or legend of the table. All the elements of the fishery impact methodology should be rewritten and combined. The indicator should be impacts to the fall chinook salmon population and the standard should be the numbers supporting a healthy and viable population. We think it would help the decision maker(s) and the public to better understand the significance of the impacts if all these sections on impact methodology were synthesized into one section.

Table 4-1 documented the minimal boating activity season and the overall high use angling season as October 1 through April, but the high use angling season as documented in other areas of the DEIS is different (see Figure 3-5 and Table Appendix E-5).

Response: Table 4-1 has been eliminated from the RAMP/FEIS.

Comment: MTBs are anticipated to have low potential for direct or indirect effects across all alternatives, except Alternative D. The value of the statement that MTBs have a low potential for effects in Alternatives A, B, C, and E should be explained so that decision makers and the public will understand any significant impacts from the alternatives.

Response: In Alternatives A, B, C, and the PA, MTBs would have a low potential for impact because they would be prohibited from operating when fall chinook are spawning. This was explained more clearly in the RAMP/FEIS.

Comment: The cumulative impact on the fall chinook salmon population (i.e., spawning, courtship display, redd building, and fertilization) should be developed for estimating egg, annual fry, and adult fish mortality for all disturbance activities (e.g., slow moving rafts and drift boats, people on shore, and anglers wading in the spawning beds, motor boats passing over these areas, etc.), not just an analysis of motor boats and angling. What is the annual cumulative egg mortality from all sources (e.g., sedimentation of redds, destruction of redds by floods and scouring, egg predators such as steelhead, freezing and dewatering, superimposition of redds by later spawners, human-induced, etc.)? How do river flushing and temperature conditions for fry, ocean conditions, and human-induced (e.g., commercial ocean fishing, private angling catch, river flow and temperature, human recreational activities, etc.) factors contribute to the impacts?

Comment: What are the direct, indirect, and cumulative effects under Alternatives C, D, and the Preferred to the health of the fall chinook population? How are cumulative effects defined in relationship to the health of the fall chinook population?

Response: The Environmental Consequences section has been rewritten for the RAMP/FEIS to better address these effects.

Comment: What is the relationship of the low, moderate, and high potential for adverse impacts to the health of the fall chinook population as measured by population numbers? The affected environment chapter documented that population trends of fall chinook originating from the mainstem of the Rogue River have fluctuated; however, they have increased over the decades. What is the significance of low, moderate, or high potential for adverse impacts? What is the significance of the mortality of one egg to one of the healthiest fisheries in Oregon, if not the world? We believe the identification of significant adverse effects of this type would have resulted in all kinds of different alternatives in Chapter 2 and mitigation measures identified in Chapter 4.

A range of impacts are identified from MTBs, private motorized boats, angling boats, and bank anglers from a low potential to a moderate potential to cause direct adverse effects. Presently, private motorized boats move over fall chinook and steelhead redds and, according to the results from the Alaska research, this would produce mortality to eggs. Additionally, fry would be displaced from activity over the redd. What are the impacts to the health of the fall chinook population numbers?

Response: The use of low, moderate, and high potential for adverse impacts as indicators has been dropped from the RAMP/FEIS. The Oregon/Washington BLM's Special Status Species Policy 6840 establishes the limitations on adverse impacts to the chinook population. Under this policy, BLM is required to protect the fall chinook population which is classified as a special status species and warrants the same protection as a threatened or endangered species. This includes no harm or harassment to fall chinook during all life stages: courtship, spawning, rearing, and migration. The determination to prohibit MTB activity at anytime is based on harm or harassment to one pair of chinook in courtship or one egg.

- Comment: The majority of described effects are conclusionary statements associated with a decrease or increase of boating use, but without an understandable impact methodology addressing the significance of the direct, indirect, and cumulative effects. For example, what is the relationship between boating use and adverse effects to the health of the fall chinook population? Is the relationship between intensity and duration of boating use and adverse impact, or the relationship between the distance between the bottom of the moving boats and the eggs in the redds? This issue is most critical as the understanding between the relationship of visitor use and impact is little understood.
- Response: This has been explained in Chapter 4, Environmental Consequences, in the RAMP/FEIS.
- Comment: There are conclusionary statements that the effects of Alternative C are less or the same as Alternative A. The CEQ regulations requirement is that all impacts be compared to information in the affected environment chapter, not to other alternatives.
- Response: The Environmental Consequences section has been rewritten to compare impacts to Alternative B, the No Action Alternative, that shows current conditions.
- Comment: Why are impact studies being cited in the affected environment section? The Alaska study is referenced in the text without any bibliographic citation in the DEIS. It is assumed that the RAMP/DEIS reference is the Alaska study by Horton (Horton, Gregg E. September 1994. *Effects of Jet Boats on Salmonid Reproduction in Alaskan Streams*. A thesis presented to the Faculty of the University of Alaska Fairbanks in partial fulfillment of the requirements of the degree of Master of Science. Fairbanks, AK). True? Please provide a copy of the referenced study.
- Response: The impact studies should not have been included in the Affected Environment section. These have been removed from the Affected Environment in the RAMP/FEIS. The reference to the Alaska study was inadvertently left out of the RAMP/DEIS bibliography. The bibliography was corrected for the RAMP/FEIS. Copies of the referenced studies can be obtained from the Medford District BLM.
- Comment: Please provide a copy of the referenced field observations and expert opinions as well as the pressure tests; they do not seem to be referenced anywhere in the DEIS. Was the pressure test about the pressure on salmon egg nests or on a receiver anchored to the bottom of the river without any redds present?
- Response: Copies of the referenced studies can be obtained from the Medford District BLM. The pressure test involved a transceiver without redds present.
- Comment: The statement that fall chinook represent one of the healthiest fisheries in Oregon, if not the world, is a very powerful conclusion. Because it conflicts with numerous statements here and elsewhere in the RAMP/DEIS, there is reason for concern.
- Response: This statement has been omitted from the RAMP/FEIS.
- Comment: What does indicator species mean? The term indicator is used in numerous places in the DEIS, but not defined in the glossary.
- Response: Indicator species is a term used for a prevalent species which can be used for the purpose of observing impacts to that one species and similar species, such as fall chinook. The glossary has been amended to include this term.
- Comment: There are many statements in the fisheries paragraph without any rationale for them. All

statements need to either have a rationale, or a reference to a rationale, or be eliminated from this section.

Response: This comment is an opinion. No response is necessary.

Comment: Descriptions should be no longer than is necessary to understand the effects of the alternatives. Data and analyses should be proportional with the importance of the impact. Threatened and endangered species discussions about coho and steelhead should not be described in the “Affected Environment” section because the RAMP/DEIS stated they are not significantly affected nor addressed in any important way as impact indicators in the environmental consequences section. Valuable information is provided in the section on coho salmon and summer steelhead, but they do not relate to impacts. They are not part of the “affected environment.”

Response: This statement is an opinion. No response is required.

Comment: Fall chinook spawning habitat is the “affected environment” that should be described and documented in this section, as “disturbance to redds” is the habitat indicator for estimating impacts in Chapter 4. This section could more appropriately be named “Present Fall Chinook Salmon Habitat.”

Response: This comment is an opinion. No response is necessary.

Comment: The background fisheries paper for revising the Hellgate RAMP (Bessey 1993) documented freshwater returns of adult fish ranging from 18,200 to 98,300 from 1974 to 1986 with the freshwater escapement averaging 45,000. An average of 2,300 fall chinook spawn annually in the three miles of the Rogue River between Lathrop Park downstream to the mouth of the Applegate River. Another 5,400 spawn in the river between the Applegate River and Hog Creek. All spawning areas identified in the DEIS occur between Lathrop Park and Hog Creek (see Map 3-1). Therefore, we assume there are an average of 8,600 adult fish (19 percent of the population in the Rogue River) return to the impact area.

Response: This comment is a statement. No response is necessary.

Comment: The level of visitor and boating use above 1991 levels may produce a significant fish mortality. Adult spawning could be affected from increased bank and boat fishing.

Response: This comment is a statement. No response is necessary.

Wildlife

Comment: A new alternative must be implemented for new studies concerning effects on wildlife. Nowhere in the proposals were wildlife species accounted for.

Response: Proposals were not written to address management objectives specifically for wildlife. The discussion of wildlife resources includes affected environment and potential effects. Potential effects associated with all alternatives, including the No Action Alternative, are disclosed in the environmental consequences discussion. Future studies concerning potential effects on wildlife would be implemented as opportunity and need arise. Wildlife monitoring would indicate when future studies may be needed.

Comment: Wildlife should be an Outstandingly Remarkable Value (ORV).

- Response: Although wildlife was not identified as an ORV, federal managers consider the wildlife resources within the Rogue National Wild and Scenic River to be an important value (see Chapter 3, Congressionally Considered Outstandingly Remarkable Values).
- Comment: The RAMP/EIS must conform to all environmental laws, including the Endangered Species Act, which appears to have been procedurally and substantively neglected. The RAMP/EIS identifies several threatened species found in and adjacent to the recreation area listed under the Endangered Species Act (ESA). Some of these include coho salmon, the bald eagle, the northern spotted owl, and the marbled murrelet. According to the RAMP/EIS, all alternatives would have a negative effect on bald eagles and their habitat. The alternatives should be changed and/or mitigation measures be implemented so that the net impact to bald eagles would be reduced or avoided with the adoption of the action alternatives.
- Response: All alternatives will comply with the requirements of the Endangered Species Act (ESA), as noted in the RAMP/DEIS and FEIS, Chapter 1. The effects determination for the bald eagle is *May Affect, Likely To Adversely Affect* (FWS ref. # 1-15-03-F-112).
- As stated in the FEIS, all recreation has the potential to modify bald eagle behavior. However, under all alternatives, bald eagles are expected to utilize the planning area for both nesting and foraging.
- Comment: Data for historical populations of wildlife and disturbance effects caused by recreation on the Hellgate Recreation Area are incomplete or unavailable.
- Response: While some monitoring of osprey and great blue herons has been conducted for the Rogue River corridor, it only provides a general display of trends in populations. Monitoring of nesting bald eagles during the Boatnik race was conducted during the 2000 and 2001 events. There is no information specific to the Rogue River that documents historical wildlife populations and their responses to recreation. Other studies confirm that wildlife are potentially impacted by a wide range of river recreationists, including hikers, canoes, kayaks, motorized boats, anglers, and picnickers (Knight and Gutzwiller 1995). All forms of recreation have the potential to impact wildlife (see Chapter 4, Effects on Wildlife, General Effects Associated with Recreation).
- Comment: A thoughtful effort must be made to ensure that the public and the action agency have good data about bald eagles, peregrine falcons, and spotted owls. Accurate survey results are required by NEPA.
- Response: Known bald eagle and peregrine falcon sites are monitored annually and efforts are made to follow up on repeated sightings for documentation of potential new territories. Aerial surveys have been conducted periodically to locate new bald eagle nests and confirm status of known nest sites. Annual winter surveys are conducted to locate and count the number of bald eagles along the Rogue River. Northern spotted owls are considered when site-specific NEPA analysis is done.
- Comment: The great blue heron and Franklin's bumblebee are among a large group of special status species identified by the Fish and Wildlife Service, the Bureau of Land Management, and the state of Oregon. The EIS should include information on how these species and their habitats will be protected so they will not eventually be listed under the ESA.
- Response: The objective of the Hellgate RAMP/FEIS is to outline a recreational program for the Hellgate Recreation Area (HRA) of the Rogue River and disclose potential impacts. It is not the objective of the RAMP/FEIS to design conservation plans. However, where specific concerns have been identified, mitigation may be developed to minimize impacts.

Great blue herons and Franklin's bumblebees are not confined to the HRA. A comprehensive plan to address how these species and their habitats will be protected would be most effective if it encompassed a broader geographic area and evaluated a broader range of conservation issues and opportunities. Such an effort is outside the scope of the RAMP/FEIS.

Comment: The BLM should monitor osprey nests and great blue heron rookeries at intervals adequate to determine trends.

Response: Monitoring of osprey nests and great blue heron rookeries has been conducted to provide a general display of trends in populations.

Comment: Where are your studies about MTB effects on wildlife? The RAMP's allowance of MTBs directly contradicts the management direction toward "providing the maximum number of wildlife sightings along the river and trail" system. The noise and wake created by MTBs is a significant deterrent to wildlife, keeping them out of their natural habitat and out of view of users. The MTBs speed, noise, and wake disturbs the western pond turtles.

Response: The BLM has not done any formal studies on this topic for the Hellgate Recreation Area. Other studies confirm that wildlife are potentially impacted by a wide range of river recreationists, including hikers, canoes, kayaks, motorized boats, anglers, and picnickers (Knight and Gutzwiller 1995). All forms of recreation have the potential to impact wildlife (see Chapter 4, Effects on Wildlife, General Effects Associated with Recreation). Motorized tour boats are only one of many potential recreation-related disturbances to wildlife along the Rogue River.

Comment: Daily use of motorized tour boats should be at least limited to late morning and afternoon. Early morning use disrupts bald eagles, nesting birds, and other users (such as anglers).

Response: Although foraging may occur opportunistically throughout the day, primary foraging for bald eagles occurs in the early morning and in the late afternoon. For the morning period, optimum foraging occurs prior to 10:00 a.m. Under the present and proposed motorized tour boat schedules, the earliest run enters the recreational section at approximately 9:00 a.m. This minimizes potential effects to foraging birds. However, motorized and non-motorized boaters, anglers, and other river recreationists will continue with activities that have the potential to create disturbance during all periods of the day, including prime foraging periods.

Under Alternative C and the Preferred Alternative, daily trips in the Dunn Reach would be required to take place before noon on holidays and weekends in July and August, in order to reduce conflicts between MTBs and float craft in that reach.

Comment: Wildlife will be endangered by additional traffic.

Response: Although additional traffic increases the probability of vehicle/wildlife encounters, it does not represent a new use to the area.

Comment: The wildlife threshold is not clearly defined. Threshold is defined as "Factors that limit use over time or space, including ecological or resource, physical or space, facility, or social constraints—all of which can fluctuate as social and environmental factors change." The key to determining potential impacts is the specific threshold at which disturbance results in wildlife losses, yet all of the alternatives allow for recreational disturbance.

Response: The specific threshold at which disturbance results in wildlife losses has not been determined for the Rogue River corridor (see Chapter 4, Effects on Wildlife, General Effects Associated with Recreation).

Comment: The disruption to wildlife caused by visitor center construction is not justified.

Response: The construction of a new visitor center as addressed in the alternatives of the RAMP/DEIS will not be analyzed in this document. However, if the need for a new or expanded visitor center is necessary, project-specific NEPA analysis will address the issues and effects on location, ORVs, traffic, types and level of services, and on all biological components, as required.

Comment: Building a new visitor center at Rand would attract more people to the area, which would adversely impact wildlife.

Response: The construction of a new visitor center as addressed in the alternatives of the RAMP/DEIS will not be analyzed in this document. However, if the need for a new or expanded visitor center is necessary, project-specific NEPA analysis will address the issues and effects on location, ORVs, traffic, types and level of services, and on all biological components, as required.

Botany

Comment: It is not understood how the botanical information provided in Appendix F is applicable for inclusion in the DEIS.

Response: The Botanical Resources Background Paper (Whitman 1993) was designed and included to support the Affected Environment and Environmental Consequences sections of the NEPA analysis process. The pertinent information from the background paper has been moved from the appendix to the Affected Environment section in the FEIS.

Scenery

No comments were received.

All Watercraft Use

Comment: The no anchor zone at Whitehorse basically prevents anchoring in approximately 75 percent of the hole. The sign placement takes away the ability to adequately fish the biggest part of the hole from an anchored position; the MTBs do not need that much room. Why are no anchor zones needed?

Response: The BLM and the OSMB have worked together to establish “no anchor zones” and “pass through zones”. No anchor zones are designed to promote the safe navigation of all watercraft in areas recognized as having potential safety problems. These zones are managed by the OSMB under OAR250-030-0041 and were not addressed in this plan (see Chapter 1, Relationship to Other Policies, Plans, and Programs).

Motorized Boating

Comment: The title of one of the Environmental Consequences sections is *Effects on Motorized Boaters*. However, the documentation addressed impacts to MTB passengers, not all passengers of motorized boating.

Response: The *Effects on Motorized Boaters* section has been divided to show the effects on each motorized boating activity. The majority of visitors by motorized boats are MTB passengers (Austermuehle 1995).

Comment: The BLM should not put all powerboats in a single group. It is unfair to motorized boat anglers to be under the same restrictions as motorized tour boats given the difference in potential impact. The impact of smaller outboard boats is not equivalent to the larger, more powerful boats. This puts undue limitations on recreational fishers as well as commercial fishing guides. It is more reasonable to create a boat length and/or motor horsepower limit rather than grouping all motorized boats together.

Response: The impacts and issues, as identified in the erosion (Klingeman et al. 1993) and fisheries (Satterthwaite 1994) studies, are similar.

Commercial Motorized Boat Angling

Comment: The Preferred Alternative states commercial motorized fishing boats will be kept to three permits with additional permits allocated on case-by-case basis. There should be no limits to commercial motorized fishing boat permits. The use of motorized boats by private users is higher than the licensed guides.

Response: The BLM restricts the use of motorized commercial fishing boats to favor the use of drift boats for commercial boat angling.

Commercial Motorized Tour Boating

Comment: It is documented that the identified indicator for impacts to motorized tour boaters is the number of recreational opportunities. It is not documented why the effects are considered adversely significant if the projected MTB trips per day are 30 percent less than the trips authorized per day in 1991. Why is 30 percent the threshold of significance? The section of *Effects on Motorized Boaters* should be refined, especially the identification of the rationale for the 30 percent threshold of significance. The *Effects on Motorized Boaters* section should be expanded to consider all the design elements for motorized boating documented in Chapter 2.

Response: The Motorized Boaters category has been eliminated in the RAMP/FEIS. The effects have been analyzed in each category of motorized boat use, such as motorized tour boats and commercial motorized boat angling. The effects on MTB passengers spaces have been re-analyzed and the effects section for MTBs has been rewritten. The 30 percent threshold has been eliminated.

Comment: The Preferred Alternative fundamentally fails to address the significant adverse effects of jetboats on the ORVs of the river and to propose an alternative that fully addresses that issue in a manner compliant with the WSRA. As demonstrated by the charts and graphs in the front of the RAMP, jetboat use has increased dramatically since the river was first designated resulting in increased noise, wakes, and high-speed boats on the river. Those impacts and others associated with them must be addressed in order to protect and enhance the river's values as they existed at the time of designation. There is no evidence to support any determination by the BLM that the amount of use it currently allows and proposes in the RAMP protects and enhances ORVs.

Response: There were approximately 70,000 MTB visitors to the HRA in 1994, which is about 65 percent of the total visitors by watercraft. As all uses on the Rogue have increased, the ratio of visitors remains the same as in 1968. As a result of a thorough study process, no significant adverse effects from jetboats on the ORVs were identified. The WSRA does not mandate that conditions be held as they were at the time of designation. Jetboating is one form of recreation, and recreation is an ORV. The BLM's objective is to balance all recreation uses.

Comment: The entry time from August 15 to August 30 in the Preferred Alternative should be restored to 9:00 a.m. The number of anglers disturbed during this period does not justify the change when considering the negative effect on floaters and MTB passengers.

Response: Alternative B identifies a 9:00 a.m. daily entry time for August 15-August 30. The Proposed Action in the RAMP/FEIS indicates an entry time of 9:00 a.m. for August 15-August 30. The number of floaters present in the Hellgate Recreation Area until the end of August is considered large enough to warrant this time change in order to maintain the reduction in conflicts between MTBs and floaters.

Comment: We agree with ending the commercial MTBs season on September 15, and their continuance on to September 30 only by request, provided monitoring indicates no spawning activity.

Response: Under the BLM's Special Status Species Policy 6840, MTB activity can be halted whenever there is potential for harm or harassment to fall chinook during all life stages throughout the year. It is the BLM's judgement MTBs will harm or harass fall chinook when the fish are displaying courtship behavior, when eggs are in the gravel, and when sac fry are still in the redd. These circumstances normally do not exist until after October 1, but could occur earlier. MTB use will be prohibited whenever these circumstances occur.

Comments: The Season of Use for MTBs is not clearly defined.

Response: "Season of Use" is defined as the part of year when an activity may occur (see Glossary). The proposed season of use for MTBs varies according to alternative (see Table 2-5).

Comment: The MTB boat size should be as small as possible. Limit boats to no larger than 36 feet with the permittee's existing boats and smaller if feasible.

Response: Alternative C eliminates the large boat and limits the size of all other boats to a maximum of 36 feet. Alternatives A and the PA reduce the number of large boats to one.

Comment: It is unclear if the MTB analysis considers the impact(s) associated with the size of the motorized watercraft. The impact(s) associated with a 6-passenger motorized watercraft are likely to be much less than those associated with the large commercial tour boats. Please clarify this issue.

Response: All jetboats throw a wake. The soil erosion study states that: "MTBs make [a] somewhat larger wave [than private jetboats]. . . it appears that boat operation and maneuvering have a greater influence on wave size than does hull size. There is no way to confidently assign a proportionate share of this erosion to MTBs versus other types of motorized watercraft. Waves from all types of motorized craft strike the same banks and contribute to wave-related erosion." (Klingeman et al. 1993).

Comment: The BLM should seriously consider restricting the size and number of jet boats on the river. The MTBs add to the crowding problem on the river. The amount of MTB use allowed on the river degrades the experience of all types of users. The MTB trips per day should be reduced; 19 trips/day is too high.

Response: The RAMP/FEIS includes a range of alternatives. Some of the alternatives reduce the number of MTB round trips; others increase the number. Alternative C removes the largest MTB and restricts the size of any future boats. Alternatives A and the PA reduce the number of large boats to one.

Comment: The requirement to phase out larger tour boats would be counter productive if the desire from everyone is to reduce river traffic. It seems that the larger boats could be used as a tool to minimize river traffic – at times, one boat could be used instead of two. Removing the large MTB would increase the number of trips per day.

Response: Alternative B and the PA restrict the number of boat trips per day to 19, regardless of boat size.

Comment: In the 1990s, BLM stated the large 80-passenger boats would be off the river by 1998. Here it is 2001 and one of the boats is still in operation. Why? At the open house, a date of 2002 was given. Is this the date that boat would cease operation?

Response: The interim permit stipulations for the MTB's permit, issued in 1990 and continued through 2005, indicated that removal of the larger boats (two are currently allowed) would occur by the 1995 and 1996 seasons. These permit stipulations also included the provision that if studies of jet boat impacts revealed that use of the larger boats was compatible with the protected values of the Rogue River, then the removal stipulation could be modified.

The subsequent studies of the impacts from jet boat use on the Rogue River, including those on soil erosion, fisheries, and boating safety and conflicts (see Executive Summary), did not find a significant difference between the impacts from the 36' boat and those from the 43' boat. The *Rogue River Boating Safety and Conflicts Study* did not recommend elimination of the larger boat (WRC 1995).

The Bureau of Land Management elected to defer removal of the larger boat until completion of this management plan and environmental analysis. The permittee, Hellgate Excursions, voluntarily discontinued the use of one of the permitted large boats in the interim.

Alternative C would remove both large MTBs from the river. Alternative A and the PA would remove one of the two large boats.

Comment: Please limit the power of all boats on the Rogue no more than 15 hp.

Response: This reduction in power would be a major adverse impact to the recreational experience of the motorized boaters. Limiting boats to 15 hp motors would virtually eliminate most jet boat use and would allow upstream passage for jet boats only in areas with very little current.

Comment: The RAMP states that for the PA, 19 round trips per day would be the maximum allowed in the Hellgate section. It also states that two permits would be issued and existing permittees would be issued permits. Does this translate into a total of four permits issued to jet boaters? Furthermore, is each permittee allowed 19 round trips per day? More information about the precise number of individuals who may gain access each day via a MTB should be disclosed. As it stands, the RAMP is quite confusing and misleading.

Response: The PA would allow only two MTB permits. The existing permittee would hold two permits, unless a permit(s) is transferred. No additional MTB permits would be issued. The combined number of round trips per day would be nineteen; ten for one permit and nine for the other. The maximum visitor use per day would be approximately 1,000 MTB passengers. Permits can be transferred, but the number of trips would never exceed 19.

Comment: The Preferred Alternative allows a maximum of 133 tour boats a day to travel round-trip on the river. This is a frightful number of jet boats to compete with the mass of rafters. Disallowing jetboats on weekends will help. There should be rest days from MTBs. The MTBs should run three days/week through the months of May and September (one day being on the weekend) and

four days/week MTB free (one day being on a weekend). The MTBs should be limited to 2-3 trips per week.

Response: Alternative B and the PA keep the number of MTB trips per day at the current level of 19, not 133 as stated in the comment. Any major manipulation of the schedule, such as limiting the MTBs to 2-3 trips per week, would be a major adverse impact to MTB visitors. Under the PA, the number of MTB trips would be reduced in the Dunn Reach on weekends and holidays in July and August.

Comment: The No Action Alternative indicates that current interactions with jetboats are moderate to high, but fails to identify in the Preferred Alternative how these adverse interactions would change given the limited restrictions imposed on holiday weekends. The minimal changes are unlikely to change the moderate to high level of interactions with jetboats. Ultimately, the limitations placed on jetboats do little to remedy the adverse impacts and degradation to ORVs and the river environment. The impacts are not honestly assessed in the EIS. While the BLM has done a thorough job of studying the effects on various users, wildlife, and river ecology, the various alternatives fail to address the core of the issue. The stated objective of the revision to the plan is to address conflicts between motorized and nonmotorized users. The various alternatives limit or expand the number of users or the size of craft as a means to limit the conflicts between users. Regulating the size of the crafts or the number of trips by MTBs is not enough. The PA does little to resolve boating conflict.

Response: Future management actions to address conflicts between nonmotorized and motorized users could include implementing regulated use limits for all watercraft users. Once use limits are reached, an amendment to this plan would occur. The BLM has worked diligently through the years to address issues of boating safety and conflict.

- In 1991, the BLM reduced the number of round trips from a high of 23 down to 19. At that time, other requirements were made concerning the operation of the MTBs in order to reduce conflict. These restrictions and requirements are a part of the PA. Currently, the MTBs are the only use with limitations in this section of the river.
- The BLM and OSMB have worked together to formulate “pass through” and “no-anchor” zones, which are in place on the river.
- The PA reduces the number of MTB trips in the Dunn Reach and specifies the timing of MTB visits during peak use periods in July and August. This is where and when conflicts occur.
- The PA reduces the number of large boats to one.
- The PA requires spotters or lead boats at sites of safety concern.
- The PA allows the BLM to impose restrictions on float craft use to reduce adverse interactions, if monitoring shows this is necessary.

Comment: The five proposed alternatives are all very similar, each of them failing to accurately demonstrate what motorized boating does to diminish river integrity and personal safety.

Response: Various studies were conducted to gather information to assist in river-related decisions (see Rogue River Studies). The BLM commissioned one such study regarding the safety of river users and the study findings were used to construct the range of alternatives (Water Resources Council 1995).

- Comment: Close monitoring should be done whenever the river flow drops and the level and width recedes to the point that the safe operation of the MTBs becomes questionable.
- Response: Water levels and other operating conditions are monitored and discussed with the MTB operators. For example, in 2001, MTBs were restricted to the Applegate Reach because of low water flows.
- Comment: New information is vital to the welfare of river residents and wildlife; the BLM should conduct new studies to limit tour boat and motorized boat use.
- Response: Future studies would be conducted as needed. Study results may or may not provide information that would limit tour boat and motorized boat use.
- Comment: A speed limit for MTBs should be instituted to ensure protection of ORVs. Could the BLM make a no wake rule for the jet boats as they pass dredges? The boats' wakes flip the dredges over, causing oil and gas spillage. The MTBs pose a safety threat to other river users. The MTB operators drive too fast and do not slow down at boat ramps or swimming areas or for the boat and bank anglers and small watercraft. Swimming has become hazardous and it is not an exaggeration to say that one half of the MTBs do not slow down if there is a swimmer in the water. The MTBs create wakes, which flip other watercraft (kayakers, floaters); the wakes also wash away items on the riverbanks. The MTB's speed should be reduced. The off plane for MTBs in designated areas should be strictly enforced. Motorized tour boats should be required to come off plane and slow down before passing nonmotorized craft in flat water. Motorized tour boats usually wait to enter rapids until all nonmotorized crafts have cleared the rapid. This should be a written requirement.
- Response: The Oregon State Marine Board (OSMB) is the agency responsible for establishing boating regulations. Any change in boating regulations would have to be initiated and processed by the OSMB. MTBs are monitored by Oregon State Marine Board (OSMB) deputies for compliance with OSMB regulations regarding speed at boat ramps and other no-wake areas (OAR 250-010-2500). Boat operators are currently required to observe slow-no wake, maximum five mph speed limit within 200 feet of a boat ramp, marina, or moorage with a capacity for six or more vessels; a floating home moorage with six or more structures; or people working at water level. Because of the maneuvering and navigating characteristics of jet boats, they are not always able to come off plane. Therefore, in some areas of the river, they will be at speed and on plane throwing a wake. It is incumbent on other river users to be aware that when a jet boat passes, it may throw a wake that can wash over items on the shore.
- Comment: The RAMP literature search mentions damage to salmon redds caused by wave action from motorboats in differing depths of water. The obvious mitigation measures here are mandatory horsepower and speed reductions, neither of which are mentioned or analyzed in the RAMP/DEIS.
- Response: The mitigation measures of mandatory horsepower and speed reductions are not considered adequate for protecting salmon redds. The BLM recognizes the best protection for the salmon redds is a season of use for MTBs that ends when chinook salmon are spawning.
- Comment: Thrill power maneuvers are unnecessary and inappropriate on a wild and scenic river.
- Response: These maneuvers would be restricted to specific areas and times in some of the alternatives.
- Comment: The statement about allocations in the Applegate Reach representing an acknowledgment that the primary watercraft traffic is the MTB should be clarified.

Response: This statement in the RAMP/DEIS was incorrect. It should have indicated the primary river user in the Applegate Reach is the motorized tour boat passenger. This has been corrected in the RAMP/FEIS.

Comment: The Executive Summary states the need to revise the plan is due to an increase in conflicts among river users, particularly between jetboaters and boat floaters during the summer months and between jetboaters and anglers in the fall fishing season. Motorized boat use causes conflicts on a daily basis with nonmotorized boat users. Limit MTBs to a shorter stretch of river. The motorized tour boats should turn around at Ferry Hole, Robertson Bridge, Indian Mary, or Galice. The 1978 Activity Plan addressed management zones, which were overlooked in the DEIS. MTB runs should be shortened in the Dunn Reach and prohibited below Galice, especially in the Natural Zone.

Response: Alternatives A, C, and the PA address the boating conflict issue by reducing the number of MTBs using the Dunn Reach on weekends and holidays in July and August. This is the reach of river where most conflicts occur, especially during weekends and holidays in July and August. The RAMP/FEIS replaces the 1978 Activity Plan management zones with river reaches. The purpose of management zones was to control shoreline developments; not to regulate river use.

Special Boating Events

Comment: The special motorized boating events statement should be clarified into an alternative element that can be analyzed. The permissive nature of several statements in the RAMP/DEIS regarding special motorized boating events without analyzing the impacts does not satisfy CEQ regulations for alternatives.

Response: Under Alternatives B, D, and the PA, proposed special boating events in the Hellgate Recreation Area would be subject to specific environmental analyses. Possible impacts would be analyzed at that time.

Comment: The hydroplane races should be reevaluated taking into consideration the management direction that states, "Only such types of equipment compatible with management objectives will be permitted." (See Appendix C – Recreation, RAMP/DEIS.)

Response: A NEPA analysis tiered to the Record of Decision would be completed before any new type of equipment was allowed.

Comment: The continuation of special motorized boating events (now without any environmental analysis) is also improper on a wild and scenic river. There is no evidence that boat racing or special MTB events were ever considered to be appropriate by Congress and are newly developed. Whereas in other legislation designating wild and scenic rivers or their corollary, wilderness areas, Congress has explicitly stated when it intended to grandfather in a particular motorized use or allow a use to increase to the detriment of the protected area.

Response: The intent of Congress with regards to motorized use in the HRA was not directly addressed in the Wild and Scenic Rivers Act (WSRA). The WSRA does require the development of plans for the management of wild and scenic rivers. The 1972 plan was developed in response to that direction. In that plan, motorized use is recognized as a legitimate use on the Rogue Wild and Scenic River.

The Boatnik Races, which consist of small outboard hydroplanes, started in the 1950s and continue to the present. This was an accepted use of the river at the time the Rogue was designated. The marathon-type jet boat races were analyzed at length in several NEPA docu-

ments and those analyses have withstood several appeals.

Comment: The RAMP fails to disclose that it leaves room to allow more jetboat use, such as with special events, than presently is allowed. Under the Preferred Alternative, the BLM is allowed to authorize a greater number of permits for special motorized boating events on a case-by-case basis, whereas currently, no additional permits would be allowed. These issues should be addressed in the RAMP.

Response: The RAMP/DEIS states (see page 71 and Table 2-6) “A greater number of permits would be considered for other special motorized boating events. The analysis would require that the permits protect and enhance the outstandingly remarkable values (ORVs) for which the Rogue River was included in the National Wild and Scenic Rivers System.” New permits would be considered on a case-by-case basis and would be subject to NEPA analysis.

Comment: The Boatnik Races represent a very small piece of the river usage and are an economic benefit to Josephine County. The Boatnik Races are an intrinsic part of Grants Pass and the Rogue experience. The river should be open to all uses: power boats, rafts, kayaks, and tour boats, as well as races and their spectators. We support the continued issuance of the Boatnik permit, as it has been an integral part of the very successful festival for many years. The Grants Pass Active Club uses the revenue generated from these races to support the community.

Response: The races would continue under all alternatives, except Alternative C.

Comment: Jetboat races should not be allowed in the Dunn Reach. It is a recent exception to the current management plan and should not be included in any form in the revised plan. The exclusive use by the loud, high speed race boats ruins the natural environment for all visitors to the area, even if only for two hours. The Dunn Reach should be maintained as it was intended, as a natural environment. Jetboats promote conflicts between users and should be discontinued in the Dunn Reach. The Preferred Alternative is unclear and needs clarification. The first and third sentences on page 70 of the RAMP/DEIS leave it unclear what is “normal” and what is being protected in the Dunn Reach.

Response: Under the PA, special motorized boating events would most often occur in the Applegate Reach. However, as new events are proposed, they would be analyzed on a case-by-case basis through the environmental assessment process, which could allow events to occur in the Dunn Reach. The BLM strives to maintain a balance of recreational opportunities available to various users.

Nonmotorized Floating

No comments were received.

Nonmotorized Boat Angling

Comment: There should be an evaluation of current and potential boating use by anglers.

Response: BLM staff conducted field verification visitor counts in August 2001 to establish data on current use levels. Staff monitored and recorded use levels at launch points and counted total water craft and passengers in the Applegate and Dunn reaches. These counts were used to evaluate data used in projected use levels and to amend use assumptions as appropriate. Periodic monitoring of use levels has been included as a component of a resource monitoring plan in the RAMP/FEIS.

Bank Angling

Comment: The Effects on Bank Anglers section in Chapter 4 is confusing and should be rewritten.

Response: This section was rewritten for the RAMP/FEIS to show impacts by alternative to the baseline established in the No Action Alternative.

Boater Fees and Permits and User Fees

Comment: Limits, regulations, and fees imposed on users would be most unfortunate. A better solution would be if the BLM spent more time and effort advising the public about times and reaches that are likely to be crowded, then river users can decide whether they want to participate.

Response: This information would be added to the current educational process in which the BLM is engaged. Presently, information on river and boat ramp etiquette, safety, and outdoor use ethics are available to the public in several forms: web pages, brochures, information letters, posters, bulletin boards, and exhibits.

Comment: BLM should not impose permits on any member of the public.

Response: Currently, the BLM requires permits only for commercial use and special motorized boating events on the Rogue River. Commercial permit requirements are mandated by BLM regulations (43 CFR Part 8372). Under Alternative C and the PA, a limit on commercial permits would be imposed if monitoring indicates that use limits are reached. Once use limits are reached, an amendment to this plan would occur. Permits for private use would be required under all alternatives, except Alternative B. Permits would be limited in Alternative A, C, and the PA.

Comment: There should be no fees.

Response: Boater fees would be required in all alternatives for commercially-guided water craft. User fees and boater fees would be required under Alternatives A and D. Alternative C and the Proposed Action would require no user fees, but boater fees would be required if monitoring indicates that use limits are reached. Once use limits are reached, an amendment to this plan would occur. No user or boater fees would be charged under Alternative B.

Comment: What authority does the BLM have to levy fees on any user?

Response: Authority to levy fees is granted through the Code of Federal Regulations (43 CFR 8370). In 1984, the BLM placed commercial use under permit in order to address user conflicts, deteriorating resources, and increased concern for safety. The BLM began collecting commercial fees at that time.

Comment: If fees are levied for all visitor use by water craft, how would the BLM enforce this?

Response: BLM resource and law enforcement personnel would monitor use and take appropriate measures to ensure compliance to any permit or access regulations.

Comment: The BLM should keep fees where they are and continue to work with both the private boaters and outfitters to develop a formal business plan for long-term management of the fee demo program.

- Response: The Recreation Fee Demonstration Program, a Congressionally-mandated program, is outside the scope of the RAMP/FEIS.
- Comment: The BLM already has a permit and user fee system in place. How are fees reinvested in river management?
- Response: The BLM currently allows commercial use in the Hellgate Recreation Area through permits and collection of commercial fees. Commercial fees are not “user” fees. The 3 percent fee paid by the permittee to the BLM is for the privilege of making a profit or gain while using public lands and waters. These fees are retained for management of the Rogue River for programs, such as river clean up, site maintenance, site repair and development, public outreach, law enforcement, and commercial permit issuance.

Recreation Opportunities

- Comment: Why is the BLM proposing development of new facilities in the river corridor?
- Response: The BLM provides administrative and visitor services to meet the needs of present and future visitors, protect the natural environment, maintain public health and safety, and enhance the recreational experience. The 1972 Rogue National Wild and Scenic River Development and Management Plan states, in the recreational area “. . . sufficient recreation facilities, on both private and Federal land, will be developed to meet the needs of the recreationists. Care will be taken that use levels do not reach the point where the quality of recreation experience or quality of the stream environment deteriorates.” The 1972 Plan also states, a recreational section of river “. . . possesses high potential for recreation development sites near the river...”.
- Comment: The RAMP illegally allows new facilities to be established in “proximity to the river” without ever defining what this means or how it is consistent with protecting Outstandingly Remarkable Values (ORVs). Any development should not degrade ORVs, and if possible, should enhance ORVs.
- Response: Section 10(a) of the WSRA states: “Each component of the National Wild and Scenic Rivers System shall be administered in such a manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration, primary emphasis shall be given to protecting its aesthetic, scenic, historic, archaeologic, and scientific features. Management plans for any such component may establish varying degrees of intensity for its protection and development, based on the special attributes of the area.”
- Facilities/sites have been proposed that are recommended for development based on their physical characteristics and attractiveness to recreationists. A NEPA analysis tiered to the Record of Decision would be completed before any facility/site development takes place. Proposed facility development may or may not occur as details of feasibility and enhancement of ORVs, or lack thereof, surface with site-specific analysis. In many cases, development is intended to mitigate environmental impacts and to address visitor health and safety concerns resulting from use of the river areas without facilities.
- Comment: The BLM should develop new campsites, day-use areas, and trails, and new and better facilities to better handle the volume of visitors we have now and the increased numbers anticipated in the future. Constructing new facilities does not necessarily mean they would attract more users.
- Response: Alternatives C, D, and the PA provide for improvement and development of camping, day-use areas, trails, and visitor center facilities.

Comment: Improvements for some boat ramps and campsites would provide enhanced opportunities, but would increase interactions between visitors and competition for sites.

Response: Improvements to existing recreational sites does not necessarily generate an increase in visitor use or conflicts. In fact, conflicts and competition may be reduced by dispersion of use.

Comment: More people would be on the river and consequently conflicts among campers, hikers, anglers, and boaters would be common.

Response: There is no evidence that there would be significant conflicts among campers and hikers because more people would be using the river. The range of alternatives in the FEIS proposes several techniques to help reduce conflicts among users. The majority of campers and hikers are land-based recreationists, rarely encountering on-river users.

Recreation Opportunity Spectrum

Comment: It is not clear what the rural river Recreation Opportunity Spectrum (ROS) management standard represents or where it originates. The standard appears to be a statement of condition rather than of existing policy or direction. The reference to a management ROS prescription standard should be eliminated and other sections of the DEIS using this alleged standard should also be modified. The BLM should provide the NEPA analysis and decision and/or plan that establishes a policy decision or allocation of modified natural motorized river, including the social encounters for a rural river. If it cannot be found, this section should be removed from Appendix C and other sections dependent on the assumption of a rural river ROS management standard should be changed to reflect the actual policy.

Response: The rural river class is not a standard; it is a statement of existing conditions, which provides the framework for planning and managing recreation resources.

Comment: It is true that the largest user of the Applegate Reach in the warm summer months are visitors by MTB, but what does the acknowledgment statement have to do about allocations? The BLM made a conscious decision early on in the EIS process not to vary ROS category by alternative.

Response: The statement that MTB users are the largest user group on the Applegate Reach is a statement of existing use, and was taken into consideration when using ROS to determine existing condition. This statement is not related to allocations. It is correct that ROS was used as a tool to identify existing conditions (physical, social, and managerial) in the planning area and not used as a tool in the alternatives.

Recreational Mining

Comment: The BLM should issue permits for dredging activities from the Rand Visitor Center.

Response: The permits that need to be acquired prior to commencing dredging activities on the recreation section of the Rogue River are the Oregon Department of Environmental Quality (ODEQ) 0700-J General Permit and a Oregon Division of State Lands (ODSL) Scenic Waterway Removal-Fill Permit. The ODEQ 0700-J Permit is a National Pollution Discharge Elimination System (NPDES) permit issued pursuant to Sec. 402 of Clean Water Act (CWA). The Environmental Protection Agency (EPA) administers the CWA. The EPA has authorized ODEQ to administer the CWA program in Oregon. The ODSL Scenic Waterway Removal-Fill Permit is issued pursuant to Oregon Revised Statute 196.825. The BLM has no authority to issue state or NPDES permits.

- Comment: The BLM should allow digging along the banks for purpose of mineral prospecting/mining.
- Response: The BLM Prohibited Acts list, published in the Federal Register June 8, 1992 [57 FR 24271, paragraph 8(i)], prohibits the “Digging, scraping, disturbing or removing natural land features for the purpose of mineral prospecting or mining.” The ODSL restricts mining conducted under a Scenic Waterway Removal-Fill Permit to the existing wet perimeter of the stream per ORS 390.835(17)(b), which does not include the stream banks.
- Comment: The BLM should educate the public on recreational mining.
- Response: The BLM Medford District Office publishes a brochure, *Recreational Gold Panning and Dredging on the Medford District*. This publication, as well as state agency publications pertaining to the subject, are available at BLM offices.
- Comment: Recreational mining was not mentioned in the RAMP.
- Response: Recreational mining was addressed in the DEIS under day-use recreational opportunities and in Appendix C. This information has been expanded in the FEIS.
- Comment: Small suction dredges have no significant impact on the river.
- Response: Dredging when conducted under state permits, following stipulated waste disposal limitations and special conditions, results in an acceptable level of impact to the river.
- Comment: The closing to mineral entry of the Siskiyou National Forest and adjoining BLM lands increases the need for more recreational mining opportunities.
- Response: The mineral segregation of the above mentioned lands was put into place by a withdrawal application. The nature of the mineral segregation is temporary. In the event the withdrawal goes into effect, there is a well established principle that allows for mining claims located prior to the date of segregation to be recognized and the withdrawal is subject to those valid existing rights. This holds true for the mining claims existing at the time of the segregation. The Hellgate RAMP/FEIS would not curtail recreational mining.
- Comment: The management plan should include a map showing current mining activities, valid pre-existing rights, and areas withdrawn from mineral entry.
- Response: These items, if applicable, have been included in map form in the RAMP/FEIS (see Map 3-4).
- Comment: Recreational gold panning/dredging areas should be identified.
- Response: The entirety of the Rogue River that flows through BLM lands within the Hellgate Recreation Area is open to these activities.
- Comment: Is mining and mineral access a reasonable future action in the Hellgate Recreation Area and should cumulative impacts be considered?
- Response: The majority of the Rogue River that flows through BLM lands within the Hellgate Recreation Area is currently closed to mineral entry. The area not closed to mineral entry is located between Alameda Mine and Grave Creek. Mining claims that are currently located within the corridor are inactive with no activity proposed or foreseen. Because of this minimal mineral activity, cumulative impacts are not considered in the EIS.

Camping

- Comment: The DEIS did not document human waste as defined in the Rogue River study, Assessment of Recreation Impacts and User Perceptions of the Bureau of Land Management Recreation Section (Shindler and Shelby 1993).
- Response: Human waste was not identified as an issue during scoping. The Rogue River study revealed that users felt human waste was a minor problem. Josephine County Parks and BLM recreation sites provide access to public toilets. Under all alternatives, except Alternative B, all users would be required to pack out human waste when stopped at sites without toilets.
- Comment: What are the off-highway vehicle (OHV) users camping opportunities?
- Response: Off-highway vehicle use is prohibited within the river corridor (see Chapter 2, Issues Common to All Alternatives).
- Comment: Why was camping identified as one of the significant issues during scoping?
- Response: At the time of scoping, Josephine County campgrounds and BLM drive-in camp sites in the planning area were frequently filled to capacity during the high use season. This suggested competition for camp areas, thus the need for more camp sites if the area could accommodate the use without environmental degradation and remain consistent with the protection of the ORVs.

Trails

- Comment: The BLM should develop new trails to increase river access for the bank angler.
- Response: River access trails for bank anglers are proposed in Alternatives C, D, and E.
- Comment: Do not reduce off-highway vehicle (OHV) trails.
- Response: The 1972 Plan specifies that all trails within the Hellgate Recreation Area be restricted to hikers only (Federal Register, Vol. 37, No. 131, 1972, Transportation - Entire Area). The Rogue National Wild and Scenic River is also closed to OHV as stated in the Medford District RMP/ROD, dated June 1995. No OHV trails currently exist and none can be added.
- Comment: The linking of the Buckhorn Mountain OHV Trail to the Illinois River Trail needs independent analysis. This is a significant federal action. What are the environmental consequences? There are numerous laws that need to be complied with before designating further areas as OHV “limited” or “open”. This analysis will have to include detailed, site-specific analysis.
- Response: The Buckhorn Mountain Trail has been removed from the RAMP/FEIS as a proposed OHV trail. The 1972 Plan specifies that all trails within the Hellgate Recreation Area be restricted to hikers only (Federal Register, Vol. 37, No. 131, 1972, Transportation - Entire Area). The first quarter-mile of the proposed Buckhorn Mountain Trail lies within the river corridor in the HRA.

Day-use Areas and Public Access

- Comment: Crowding at boat ramps is commonplace. Rather than restrict the users, the BLM should explore other means of accessing the river such as new and improved boat launching facilities

to alleviate that crowding. The BLM should consider Matson Park at Finley Bend, Rand, and Argo.

Response: The BLM considers 13 boat ramps to be sufficient boat access for the planning area. New boat ramps are not being considered. Under the Proposed Action, the BLM proposes to improve four existing boat ramps, including Rand and Argo (see Table 2-13). Matson Park is a Josephine County Park and is outside the scope of this plan.

Comment: Is the BLM proposing to develop universal access fishing sites?

Response: Finley Bend is a proposed universal access fishing site under Alternatives B, C, D, and the PA (see Table 2-12).

Comment: There is not any discussion of public access in Chapter 4 in the RAMP/DEIS.

Response: Discussions of the impacts of the alternatives on public access have been added in Chapter 4. Information on universal access has also been added.

Visitor Services

Comment: The BLM should not build a new visitor/administrative center. A new visitor center at Rand will seriously impact the remote feeling of the area, which is a primary reason people visit the area. It would also adversely impact the scenic outstandingly remarkable value (ORV) and should not be built within one-fourth mile of the river. Each alternative gives brief descriptions of new visitor center site locations but lacks site-specific information. It is impossible for the public to understand any significant environmental impacts that might be associated with the visitor center range of alternatives. There is no discussion of the visitor center in the environmental consequences discussion. This is clearly not in line with the purpose of an EIS. Given that the action alternatives include the development of a center, the BLM is obligated to provide the public with sufficient information about the centers so that it and the public may evaluate the environmental impacts of the centers and whether they are consistent with the WSRA. The BLM has failed to analyze the effects of a visitor center on the river runners that would have to float by the noise, visual intrusion, and vehicle exhaust created by the visitor center and its visitors. Rand is located in the Transitional Zone, identified in the 1978 Rogue River Activity Plan (RRAP), of the Hellgate (USDI 1978). No developments visible from the river should be permitted in this zone. The proposed Visitor/Administrative Center (Center) at Rand is inconsistent with the RRAP because the proposed Center would be clearly visible from the river. Attempts to use vegetation as a visual shield are insufficient.

The now defunct Smullin EA raised a number of issues and questions. A number of those are still very much outstanding, having never been adequately analyzed or answered. All of the previous comments and public input generated during the Smullin EA should be incorporated as input into the RAMP. Your proposed Rand location is in total conflict with the goal of preserving the natural setting of the Rogue River canyon. The document does not cover the purpose or the function of the Center. The RAMP/DEIS does not adequately incorporate the proposed Administrative Center at Rand. The presence of a facility as planned in the Rand location is very inconsistent with restrictions of private property owners in regards to retaining the natural flavor of the Wild and Scenic area.

Response: The construction of a new visitor center as addressed in the alternatives of the RAMP/DEIS will not be analyzed in this document. However, if the need for a new or expanded visitor center is necessary, project-specific NEPA analysis will address the issues and effects on location, ORVs, traffic, types and level of services, and on all biological components, as required.

Comment: The BLM (Smullin EA) claims the existing Rand facility receives 23,000-25,000 visitors per year. Where do these numbers come from? These numbers should be analyzed in the RAMP.

Response: This is an estimate from the current Visitor Center staff. The figure was intended to represent the number of people served by the Visitor Center, including mail, telephone, and Internet customers.

Comment: Modifications to Rand, as needed, would surely be hundreds of thousands of dollars less expensive than what the BLM is proposing and not nearly as destructive of the joy one experiences while floating the recreation section. Improve and upgrade the facilities at Rand through a modest expansion of the current permit office to allow for continuation of the administration of permits for the wild section of the Rogue River.

Response: The construction of a new visitor center as addressed in the alternatives of the RAMP/DEIS will not be analyzed in this document. However, if the need for a new or expanded visitor center is necessary, project-specific NEPA analysis will address the issues and effects on location, ORVs, traffic, types and level of services, and on all biological components, as required.

Comment: There is no evidence that a visitor center at Rand to serve the day-trip river runner will in fact be used by them or is needed to serve day trippers.

Response: The visitor center at Rand does benefit the day users (on-river and off-river users). The Rand location is a day-use site, which provides a boat ramp, parking, water, restrooms, picnic area, and informational and educational materials.

Comment: The BLM has so far refused any requests to provide any information on the costs associated with the maintenance of this center, nor where the funds will come from for the maintenance.

Response: The construction of a new visitor center as addressed in the alternatives of the RAMP/DEIS will not be analyzed in this document. However, if the need for a new or expanded visitor center is necessary, project-specific NEPA analysis will address the issues and effects on location, ORVs, traffic, types and level of services, costs, and on all biological components, as required.

Comment: The BLM has refused to provide any commentary on future plans to make improvements and to continue to build and expand once the center is completed.

Response: The construction of a new visitor center as addressed in the alternatives of the RAMP/DEIS will not be analyzed in this document. However, if the need for a new or expanded visitor center is necessary, project-specific NEPA analysis will address the issues and effects on location, ORVs, traffic, types and level of services, and on all biological components, as required.

Comment: If permits were required to be turned in at a Grants Pass location, a significant number of people would have to drive 1 to 2 hours out of their way to turn in river use permits. A visitor center in Grants Pass would make it more difficult for river users to obtain permits. It would be a major inconvenience to your private river users, as well as most of the commercial outfitters, to move the permit process for the wild section of the river to Grants Pass. Rand is the only choice that makes sense; Grants Pass is out of the way and it would be inconvenient. Permit distribution is best handled at the location nearest the point of origin.

Response: None of the alternatives includes a proposal to move permit issuance to Grants Pass.

Comment: The BLM should consider sites other than Rand for a new visitor center.

- The BLM should build a visitor center in Grants Pass. It would be a positive move for the BLM to work with the city of Grants Pass on this project. A visitor center in Grants Pass would attract tourists and make it easier for floaters to obtain permits instead of driving to Rand. A joint project incorporating a volunteer community center along with a BLM visitor center is a good idea for making full use of the Texas property site in Grants Pass.
- A visitor/administrative center in Merlin would benefit the economy.
- Move the visitor/administrative services to the existing Siskiyou National Forest office.
- The BLM's Alternative C visitor center site is good (Hog Creek).

Response: The construction of a new visitor center as addressed in the alternatives of the RAMP/DEIS will not be analyzed in this document. However, if the need for a new or expanded visitor center is necessary, project-specific NEPA analysis will address the issues and effects on location, ORVs, traffic, types and level of services, and on all biological components, as required.

Comment: The CEQ guidelines do not allow the proposed recreation area visitor center to be located in the city of Grants Pass anymore than BLM's regulations would allow construction at Rand.

Response: We are unaware of any CEQ guidelines that address this issue. They do provide guidelines, through their interpretation of NEPA, that would be pertinent to site evaluation.

Comment: The EIS should discuss whether river users will be informed about how they can help reduce their impact on the environment. We suggest that rules and recommended practices be posted or distributed to educate visitors about environmental issues and pollution prevention techniques. The BLM needs to do a better job educating river users about boat ramp and river etiquette, trash dumping, and the history of the Rogue River. Congestion at existing boat ramps could be lessened by signing areas where people are to inflate rafts and other watercraft. Right-of-way rules should also be posted at the boat landings.

Response: Although not specifically addressed in the RAMP/FEIS, the BLM is making every effort to educate river users. Educational materials have been developed by the BLM as well as the Oregon State Marine Board (OSMB). The OSMB, in cooperation with Josephine County Parks and the BLM, has kiosks in place at most boat ramps along the Rogue River. These kiosks provide information to visitors regarding safe boating, river and boat ramp etiquette, catch and release, and littering. Current BLM and OSMB brochures also address many of these concerns. In addition to BLM river patrol and staff at the Smullin Visitor Center at Rand, the BLM provides two web sites and several brochures pertaining to the Rogue River. Educating visitors as to how they can reduce their impact to the environment is an important process in management of the river.

Comment: The 1972 Plan states that "Agness is the logical place to develop a center for services and supplies for both local residents and the river-using public", yet this is not addressed in the RAMP.

Response: Agness is on the other side of the coast range near Foster Bar. It is not located in the HRA and would not provide any services to the users of the HRA.

Comment: The Rand center in its present state is historic and needs to be preserved as is.

The unnecessary use of fuel for employee travel to the Rand location is inconsistent with societies' need and desire to conserve fossil fuels and reduce harmful emissions. Why would we want to require people to drive that far to work if it is not absolutely necessary?

Response: These comments are statements or opinions. No response is necessary.

Boating Safety

Comment: How were the boating safety study results used in operational management activities? An explanation of how the safety study was used by the BLM in operational management activities should be included. The "Rogue River Boating Safety and Conflicts Study" should be referenced in the Boating Safety section of the Affected Environment in the RAMP/DEIS, along with Shelby and Table 3-7. The MTBs should not be on the river. They pose a safety threat to other on river users. Jetboats should be banned from the river because they adversely effect public safety.

Response: The BLM conducted a boating safety and conflict study in 1995. The study results were utilized in developing the alternatives in the RAMP/FEIS to improve the safety of all river users, and included parameters to identify safety sites of concern, and to develop safety requirements for MTB operation, such as providing spotters at identified locations for MTB operation. The boating safety study was used to help define the Boating Safety section of the Affected Environment and to help determine the Effects on Boating Safety. These references have been added to Chapter 3 of the RAMP/FEIS.

Comment: The BLM should map the inventoried safety sites of concern. This inventory is not different than other inventories that may change over time.

Response: The safety sites of concern can change from year to year, depending on how river channels change.

Comment: Why did the analysis not address acceptable levels of safety risk? What is the definition of acceptable levels of safety risk and the estimate of these levels? Does the BLM manage for injury or for death?

Response: Safety risk cannot be reduced to zero. Boating carries with it an inherent amount of risk; however, the BLM manages the various uses in the Hellgate Recreation Area to keep boating as safe as possible. Requirements under Alternatives C, D, and the Proposed Action would reduce the risk as recommended in the *Rogue River Boating Safety and Conflicts Study* (WRC 1995). Boating safety is also managed through US Coast Guard and Oregon State Marine Board regulations. These regulations are outside the scope of this plan.

Visitor Use

Comment: The Galice Road is narrow and winding, unsuitable for the 750,000 visitors BLM believes might use the Visitor Center.

Response: The figure of 750,000 visitors was reported by a Grants Pass newspaper and does not represent the number of visitors the BLM expects might use the visitor center. A figure of 700,698 visitors was estimated by the BLM as the total number of people to visit the Rogue River corridor, not just the visitor center (Austermuehle 1995). This figure represents all visitors to the Hellgate Recreation Area lands and waters, including those managed by Josephine County Parks. Campers, day-users, bikers, drive-in sightseers, hikers, and anglers were included in this

number. The BLM estimates the current Smullin Visitor Center serves 25,000 people per year, including visitors by telephone and the Internet.

The maximum carrying capacity for the Merlin-Galice Road is 2,094 vehicles per hour. Projected use for the road in the year 2010 is estimated to be 121 vehicles per hour, well below maximum capacity.

Comment: What is missing is a distinct text section about quantities of “visitor use”, which is the reason driving the whole planning process.

Response: Extensive information on quantities of visitor use are in the document *Visitor Use Background Paper for revising the Hellgate Recreation Area Management Plan*, and is available from the Medford District BLM (Austermuehle 1995).

Comment: Need text clarification of Tables 4-6 and 4-7, Visitor Use and Watercraft Projections. What are the significant changes?

Response: The changes are apparent. Visitor use projections show different use numbers according to activity and alternative. For example, in Table 4-6, the number of private floaters would increase significantly from 4,004 under Alternative A, to 31,544 under the Preferred Alternative. That is a projected difference of 27,540 private floaters. The same follows for watercraft in Table 4-7.

Comment: Angler numbers do not appear to be fairly constant throughout the year (see Table 3-11, Table 3-12, and Figure 3-5).

Response: Angler numbers cannot be compared between Table 3-12 and Table 3-11 and Figure 3-5. Table 3-12 documents watercraft numbers in the HRA; Table 3-11 and Figure 3-5 both refer to number of visitors. Table 3-11 consists of motorized and nonmotorized angling while Figure 3-5 includes motorized angling only.

Law Enforcement and Emergency Services

No comments were received.

Outfitter Services

Comment: The number of commercial outfitters for floating and boat angling would not be limited.

Response: The number of permits for commercial motorized boat angling is restricted across all alternatives. Permits for commercially-guided water craft would be restricted in Alternative C and the Proposed Action.

Comment: Commercial river permits need to be restricted on the busiest sections.

Response: The number of permits is currently restricted for commercial motorized boat angling and commercial motorized tour boating. Under the Preferred Alternative, commercial motorized tour boat trips would also be reduced from current levels in the Dunn Reach during the busiest days in the summer and at the busiest time of day. Restrictions on the number of commercial permits would be instituted if monitoring indicates that use limits are reached. Once use limits are reached, an amendment to this plan would occur.

Comment: There should be no limits to motorized fishing boat (MFB) permits.

Response: Originally, three permits were granted because of historical use. Since the publication of the RAMP/DEIS, two of these permits have been phased out due to inactivity. One permit for commercial motorized boat angling currently exists. A moratorium was placed on the issuance of new commercial special recreation permits for any motorized boat angling or motorized tour boats until the key issues of motorized and non-motorized use on the Rogue River were addressed. In the RAMP/FEIS, Alternative A would retain the current level of one permit. Alternatives C, D, and the PA would set the number of permits at three and Alternative D would allow 30 permits.

Comment: BLM should establish a use permit for businesses engaged in boat rentals.

Response: At the present time, commercial rental operations that provide livery (rental) services on public boat ramps or at access points are not subject to BLM's special recreation permit regulations. New national policy guidelines are being developed that will further clarify what roles, if any, the BLM will take in regulating such use.

Comment: Training guides on avoiding river conflict needs to be a required part of their permit.

Response: Regulations are in place in the form of stipulations of use for commercial special recreation permits. Permittees and their guides are required to be in conformance with these stipulations. These stipulations are covered in the *Commercial Outfitter Operating Plan for the Hellgate Recreation section* (43 CFR 8365 - Rules of Conduct). The *Oregon Guides and Packers Code of Ethics* addresses this issue and is also part of the *Commercial Permittee Operating Plan*.

Landowners

Comment: The *Effects on Landowners* section mostly describe elements of the alternatives rather than comparing effects to the baseline in the Affected Environment chapter.

Response: This section has been rewritten for the RAMP/FEIS.

Comment: The RAMP/DEIS recommended Taylor Creek Bar as a primitive day-use area and a new public access fishing area. Please remove all reference of Taylor Creek Bar; a portion of this area is private property.

Response: References to Taylor Creek Bar have been removed from the RAMP/FEIS.

Sound

Comments: The MTBs are too loud.

Response: The BLM conducted a sound inventory, which indicates that the sound generated from the MTBs ranges from 46.2 dBA to 87.6 dBA, with an average of 66.5 dBA. To contrast, the average sound emanating from river riffles is 70.0 dBA (Walker and Littlefield 1994). All MTBs are within the Oregon State Marine Board's statutory sound standards for mufflers (ORS 830.260, OAR 250-10-121).

Transportation

Comment: The running surface of the road from Galice to Grave Creek is uneven.

Response: The BLM segment of road below Galice, called the Almeda Road, is scheduled to be chip sealed, pending funding, the summer of 2003. This will smooth out the running surface.

Comment: The BLM should widen the Merlin-Galice Road and add signing. The road is too narrow, causing conflicts between motorists and cyclists. The Galice area is too congested. The transportation analysis does not focus on the already high level of congestion in the Galice area and Rand during the summer months.

Do not widen the Merlin-Galice Road so more RVs and thousands of people come for a quick look and then take off.

Response: The Merlin-Galice Road is a Josephine County road. The BLM has no authority or jurisdiction over control of the traffic, nor the width of the roadway.

Comment: Where is the rationale that the Merlin-Galice Road can sustain the additional vehicular traffic?

Response: The maximum carrying capacity for the Merlin-Galice Road, as calculated using the 1994 "Highway Capacity Manual, Special Report 209", is 2,094 vehicles per hour (vph). This number has been adjusted from the 2,800 vph that was originally reported in the RAMP/DEIS. The projected usage for 2010, based upon current use, is 1,208 average daily traffic (ADT). Assuming that traffic only runs for a total of 10 hours per day, 1,208 ADT is equivalent to 121 vph, significantly lower than the carrying capacity of the highway. The projected use of the highway does not take into account any increase in traffic created by a new visitor center. If the visitor center doubled the projected traffic to 242 vph, for example, Merlin-Galice Road traffic would be 37 percent of the maximum carrying capacity.

Comment: If a new visitor center is built at Rand, vehicular and on-river traffic would increase; thus, the overall traffic noise would increase. Not only will the amount of traffic increase, but the remote feeling of the area will be seriously impacted.

Response: The construction of a new visitor center as addressed in the alternatives of the RAMP/DEIS will not be analyzed in this document. However, if the need for a new or expanded visitor center is necessary, project-specific NEPA analysis will address the issues and effects on location, ORVs, traffic, types and level of services, and on all biological components, as required.

Socioeconomics

Comment: Recreational mining contributes to the economy.

Response: Recreational mining by definition, is not an industrial activity that contributes to the economy through the production of a commodity or the creation of wage generating employment. The economic contribution of recreational mining is similar to other recreational activities, such as boating, fishing, or camping and is sometimes conducted in conjunction with those activities, especially in the Hellgate Recreation Area. Recreational mining is just one of the activities that contributes to the overall economic impact of the recreation industry that is present in the Hellgate Recreation Area. The economic contribution of recreational mining has been captured by the economic analysis model as "Misc. Activity" (see Tables 4-3 and 4-4).

- Comment: Jobs and place of work income generated by Rogue River visitation would increase under the Preferred Alternative. Please give the context and methodology for these results so they can be reviewed for accuracy. In Place of Work Income Table (Table 4-9), the methods for coming up with your figures needs to be presented in an understandable fashion to the public.
- Response: The text in the document has been clarified to clearly show that changes discussed are relative to the baseline period. Tables 4-3 and 4-4 provide details by visitor use type. Economic effects were estimated using an input-output model specifically developed by a contractor to analyze recreational uses on the Rogue River and the economic effect on Jackson and Josephine counties. Detailed documentation is available on request from the Medford District BLM Office.
- Comment: Tables 3-16 and 3-17 do not address the planning issues and have little value to the reader and the text does not seem important. Expand the *Effects on Socioeconomics* section to include comprehensive text on the baseline information in Tables 4-9 and 4-10. The important baseline numbers the decision maker and public are interested in are about motorized tour boating, private floats, guided floats, private bank anglers and guided anglers. How do these numbers relate to the significant planning issues?
- Response: Tables 3-16 and 3-17 (Tables 3-19 and 3-20 in the RAMP/FEIS) have been included to provide an overall context for the employment and income estimates by alternative discussed in Tables 4-9 and 4-10 (Tables 4-3 and 4-4 in the RAMP/FEIS). Chapter 3 refers the reader to Alternative B in these latter tables for detailed information on baseline levels of employment and income associated with specific activities. This eliminates repetitiveness and emphasizes the same economic model was used to estimate economic effects for all the alternatives, including the baseline alternative.
- Comment: The only way we knew the baselines in Table 4-9 and 4-10 were for 1997 was to find a reference in the affected environment section of the DEIS rather than find it referenced in the environmental consequences chapter. It should be clearly identified in the tables the projected income and jobs for the baseline is for the year 1997 and projections for Alternatives A-E are to the year 2007. Is this true?
- Response: The text has been revised to clearly identify both the baseline period and the projected period.
- Comment: The *Effects on Socioeconomics* analysis in Chapter 4 does not document what impacts (changes to income and employment) are significant impacts.
- Response: The text in Chapter 4 highlights the changes by alternative displayed in detail in Tables 4-9 and 4-10 (Tables 4-3 and 4-4 in the RAMP/FEIS). These changes have been documented as required in an Environmental Impact Statement. Care was taken to describe these changes in a factual manner, without assigning adjectives which imply that the incomes were either beneficial, adverse, significant, or minor. This approach has been continued into the Final EIS.
- Comment: The season of use for MTB visitors in Alternative C is May 1 through September 15. It can be extended another two weeks to September 30, providing monitoring indicates there is not spawning occurring in the major spawning areas. There is a known significant adverse impact to the recreational experience of MTB visitors, income, and employment if the last two weeks are eliminated from the MTB season of use. What are the impacts?
- Response: A sensitivity analysis was not conducted to determine the income and employment associated with the last two weeks of September due to the number of unknowns related to visitor response.

Comment: A visitor center in Grants Pass or Merlin could contribute to the economy.

Response: This is an opinion. No response is necessary.

Environmental Justice

No comments were received.

Management Costs

Comment: We do not understand how effect methodologies were derived, as the Management Costs section for the Affected Environment is one small paragraph. Table 4-11 is not explained as to the year of comparison and the projection years. A rationale for understanding significance was not provided. Management costs are inappropriately compared to Alternative B instead of being compared to the baseline described in the Affected Environment. The impacts to management costs in the HRA should be documented in terms of the cost impacts of providing services to different user groups. The Management Costs section should be rewritten in order for the decision makers and the public to understand the significance of the changes in projected management costs.

Response: Table 4-11 has been removed from the document and the effects section has been rewritten.

Comment: An impact not addressed relates to the issue of how management costs should be evaluated. An indicator could have been the hands-on visitor services provided by the BLM to major user groups of the river in the HRA. Hands-on visitor services are described as trash pick-up (including human waste); toilet construction, maintenance and cleaning; interpretation at boat ramps and on the river; traffic control at boat ramps; law enforcement; and construction and maintenance of facilities.

Standards might be:

- significantly beneficial impact – major user groups do not use hands-on visitor services or they pay for them through a user fee.
- adverse impact – one to seven work-months are used to provide hands-on visitor services resulting from inappropriate behavior, trash collection, and/or human waste removal.
- significant adverse impact – over seven work-months are used to provide hands-on visitor services resulting from inappropriate behavior, trash collection, and/or human waste removal.

Response: This comment is an opinion. No response is necessary.

Gross Revenues

Comment: A methodology should be developed for gross revenues that documents the relationship of all user groups paying a share of the cost of river management. Fee adjustments should be explained and the actual fees in dollars projected by the three user groups in each alternative be documented. The Gross Revenue section should be rewritten in order for the decision makers and the public to understand the significance of the changes in projected gross revenues, including the impacts documented in gross dollars.

Response: To show the effect of different alternatives on gross revenues, we only need to know whether revenues would increase or decrease. An increase would be beneficial and a decrease would not be beneficial (see Chapter 4).

Comment Letters from Federal, State, and Local Government



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 10
1200 Sixth Avenue
Seattle, WA 98101

000110

Reply to

Attn. of:

ECO-O88

94-077-BLM

FEB 20 2001

Ms. Cori Cooper, Team Leader
Bureau of Land Management
3040 Biddle Road
Medford, Oregon 97504



Dear Ms. Cooper:

The Environmental Protection Agency has reviewed the draft Environmental Impact Statement (EIS) for **Rogue National Wild and Scenic River: Hellgate Recreation Management Plan** in southwest Oregon, near Grant's Pass. We are submitting comments according to our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act.

The draft proposed management plan covers a 27-mile section of the Rogue River from Applegate River to Grave Creek. The Rogue River was one of eight rivers identified as part of the National Wild and Scenic Rivers System when the Wild and Scenic Rivers Act was passed in 1968. The segment of the Rogue River found in the Hellgate Recreation area was designated because of exceptional recreation opportunities.

The preferred alternative (Alternative E) proposes to increase the level of recreational activities, decrease the conflicts between motorized and non-motorized boats, anglers and private property owners, and protect the environment and outstanding remarkable values found there. These values include scenery, fisheries, and recreation opportunities.

Four other alternatives propose to 1) allow fewer boats and visitors on the river, 2) maintain current management practices (no action), 3) increase the number of boats and visitors, and 4) maximize the number of visitors and boats.

Based on our review, we have rated this EIS, EC-2 (Environmental Concerns-Insufficient Information). This rating and a summary of our comments will be published in the *Federal Register*. A summary of the rating system is enclosed for your reference. Discussed below are the elements that should be addressed in the final EIS.

Alternatives

The EIS should explain how the preferred alternative (E) would increase recreational use while accomplishing the stated purpose and need of protecting the environment and decreasing conflicts among river users. We are concerned that the following elements would compromise an already crowded situation: 1) more people would be on the river and consequently conflicts among campers, hikers, anglers, and boaters would be common. One example, improvements for some boat ramps and campsites (Page 221), would provide enhanced opportunities but would increase interactions between visitors and competition for sites; 2) the number of commercial outfitters for floating and boat angling would not be limited; 3) overall recreation levels would not be regulated unless carrying capacity is reached; 4) the level of visitor and boating use above 1991 levels may produce a significant fish mortality (Page 123). Adult spawning could be affected from increased bank and boat fishing.

Other concerns that need more explanation include: more recreational use has impacted wetlands (Page 122). Most of the wetland areas have been neglected in the past or affected by human activities, such as mining or recreation access sites, and how will stream bank erosion be dealt with. Erosion has been identified as a problem by landowners who own homes along the river and motor boaters.

Because of the above concerns, we recommend the adoption of Alternative A, the environmentally preferable choice for the following reasons: 1) fewer conflicts would occur with the number of visitors reduced to 1985 levels (40,000) 2) there would be low to moderate interaction between visitors; 3) no new facilities would be built; 4) visitor use would be managed through fees, regulations and limitations; 5) the number of commercial outfitters would also be limited. However, the final EIS should include the cost of the user fees.

Protection of Threatened/Endangered and Special Status Species

The EIS identifies several threatened species found in and adjacent to the recreation area listed under the Endangered Species Act (ESA). Some of these include coho salmon, the bald eagle, the northern spotted owl, and the marbled murrelet.

According to the EIS, all project alternatives would have a negative effect on bald eagles and their habitat. We recommend that alternatives be changed and/or mitigation measures be implemented so that the net impact to bald eagles would be reduced or avoided with the adoption of the action alternatives.

The Great Blue Heron and Franklin's bumblebee are among a large group of special status species identified by the FWS, the Bureau of Land Management, and the state of Oregon. The EIS should include information on how these species and their habitats will be protected so they won't eventually be listed under the ESA.

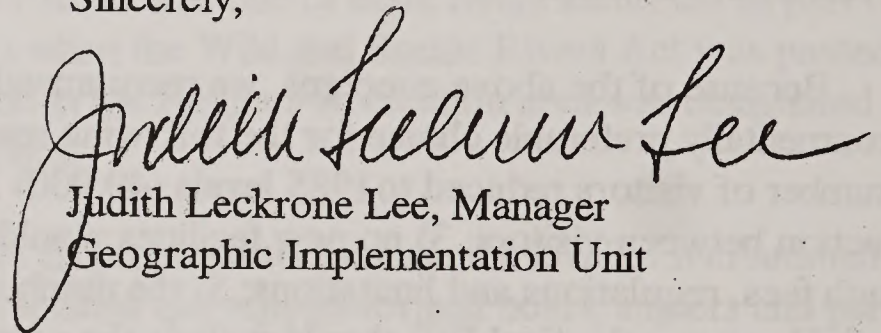
Operating Concerns and Visitor Management

The EIS should discuss whether river users will be informed about how they can help reduce their impact on the environment. We suggest that rules and recommended practices be posted or distributed to educate visitors about environmental issues and pollution prevention techniques.

The EIS should provide more information, including a map, on where trails would be developed and maintained. According to the draft EIS, there are only informal trails developed by anglers, mountain bikers, off-highway vehicles, and horseback riders. We recommend that the number of trails and paths in natural areas be limited to minimize the destruction of vegetation, erosion and sedimentation, and disturbance to wildlife.

Please contact Val Varney at (206) 553-1901 if you have any questions. Thank you for the opportunity to review this draft EIS.

Sincerely,



Judith Leckrone Lee, Manager
Geographic Implementation Unit

000013

<periley@usgs.gov> on 01/22/2001 07:56:31 AM



To: Cori_Cooper@or.blm.gov
cc:

Subject: EIS Review

Cori,

USGS has no comments on the Rogue National Wild and Scenic River: Hellgate Recreation Area Management Plan/Draft EIS. Thanks.

Trish Riley

Josephine County, Oregon

Board of Commissioners: Jim Brock, Harold L. Haugen, Frank Iversen



COMMUNITY DEVELOPMENT

Wm. Bruce Bartow, Director
510 NW 4th Street / Grants Pass, OR 9752
(541) 474-5421 / FAX (541) 474-542
E-MAIL - bbartow@co.josephine.or.us

OFFICE HOURS

8-12 & 1-3 (M, T, Th & Fr)
8-12 (Wed Only)

15 February 2001

Cori Cooper, Planning Team Leader
Medford District, Bureau of Land Management
3040 Biddle Road
Medford, Oregon 97504

Dear Ms. Cooper:

The Josephine County Parks Advisory Board has reviewed the Hellgate Recreation Area Management Plan/Draft Environmental Impact Statement (DEIS). We appreciate this opportunity and, through the Josephine County Community Development Department, offer the following comments.

Josephine County has enjoyed a good spirit of cooperation with Medford District BLM for many years, and looks forward to a continuance of this relationship into the future. We generally endorse the Preferred Alternative (E) in the DEIS, and recognize that implementation of the Plan can, and should provide an avenue for continued, or heightened cooperation between the County and BLM. Your serious consideration of the following comments on the DEIS will be greatly appreciated.

One of the first aspects of cooperation between two parties is a recognition of the value one bestows on the other. We find that the DEIS is flawed because of an omission of the important contribution that the Josephine County Parks Department provides toward the great recreational opportunities afforded to the public in the recreation portion of the National Wild and Scenic Rogue River corridor. The draft document discusses the volume of recreation users on the river, but other than Table 3-15, fails to mention how those users are accessing the river. We suggest that the Final EIS give respectful recognition to the importance of the Josephine County Parks Department who provide and maintain boater access sites throughout this portion of river. Of the thirteen existing boat access sites on public land along this section of river, ten are owned and maintained by the Parks Department. In addition to these, we would also include Lathrop Boat Landing located upstream of the mouth of the Applegate River. Boaters who launch at this site most often drift downstream into the Recreation Area before reaching their takeout destination.

Not only do these river users take advantage of the County's launching facilities, they use the County's restrooms, picnic facilities, and water, and are most likely to leave behind trash. Most of this use is by non-motorized drift craft and fishermen, but we also see considerable use of our facility at Galice Resort by patrons of motorized tour boats. Josephine County has no day-use fee in place for covering the costs for maintaining these facilities and picking up trash. These costs are born by camping fees and grants received from the Oregon State Marine Board and Oregon State Parks. We do not begrudge this use of our county facilities. These parks and launching sites were developed for the enjoyment of all of the public. We simply ask you to recognize this value to BLM's overall recreation management planning.

The DEIS also discusses camping as a recognized use in the Hellgate Recreation Area. Here again the document fails to give recognizable credit to the Josephine County Parks Department for providing the means for camping opportunities in this area. Almost all camping in the Recreation Area takes place on County owned land. In 1999, four Josephine County Parks, including White Horse, Griffin, Indian Mary, and Almeda, hosted 63,800 camper nights of use. The campgrounds are briefly mentioned on Page 143. Other campers took advantage of free camping on County managed land at Ennis Riffle. Campers often pursue other recreational opportunities in the corridor including drifting, fishing, hiking, site seeing, or taking a tour boat trip.

As stated earlier, the Josephine County Parks Advisory Board gives general endorsement to the Preferred Alternative, however, implementation of that Alternative can have some ramifications on the management of our County Parks system.

One objective of Alternative E (Page 29) is to "increase the level of recreational use while protecting the environmental and outstanding remarkable values." Even under current management of this section of river the Parks Department has anticipated increased public use over time. However, BLM should recognize that increased use will result in additional costs to Josephine County Parks for maintaining restrooms, picnic facilities, boat launching ramps and parking areas, and collecting trash.

Another objective under Alternative E is to develop camping areas (Table 2-10). It is commendable that BLM desires to improve camping facilities on its property, but it must recognize that by doing so camper use and revenue would be diverted away from the County Parks Department. A reduction in revenue may result in a reduced level of maintenance of camping and day-use facilities. This, in turn, could reduce the quality of the experience for people visiting the Hellgate Recreation Area.

We wish to refer BLM to the document "Rogue National Wild and Scenic River Activity Plan - Hellgate Recreation Section (Medford District BLM 1978)." Page 8 of that document discusses the roles of Josephine County and BLM regarding management of

recreation in this portion of river. The County's major role, according to the document, "will be to and maintain the existing launching sites on County-owned land, and high-density, highly developed campgrounds." BLM will "focus on less intensive recreational developments. BLM's role is to provide opportunities for engaging in a wide range of recreation activities on the free-flowing nature of the river." The document further states that "(T)his does not preclude the possibility of sharing in the development of high density recreation sites with the County . . ." It appears that the Preferred Alternative's proposed development of launching facilities and campgrounds, independent of County involvement, is contrary to the intentions of this earlier document. We request that this language from the 1978 Activity Plan be included in the final Hellgate Recreation Area Plan EIS.

The 1978 Activity Plan suggests that BLM will phase out County control of lease areas (Page 8). We ask that some discussion be included in the Final EIS that guarantees that BLM will continue to honor lease agreements with Josephine County and that it will consider negotiations for additional ones.

On this subject, Josephine County Parks has had a long standing request before BLM to lease to the county parcels of property adjoining Indian Mary and Griffin Parks. The County desires the option to develop camping facilities on both parcels. The DEIS includes the Griffin Lane Complex under "Developed Day-Use Areas" (Page 102). We request that the Griffin Lane Complex also be included on the list of sites for "Developed Camping Areas" (Page 97). We hope these requests will be given serious consideration as changes in the Final EIS.

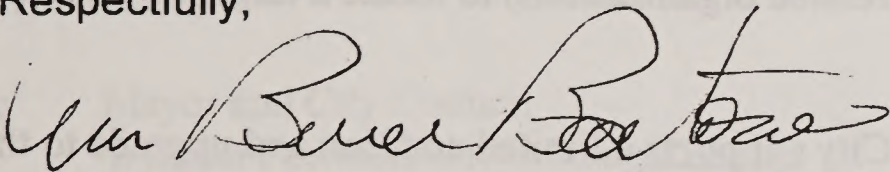
Another matter needing coordination between Josephine County Parks and BLM concerns fees for commercial water craft users. Many commercial outfitters take advantage of County park and launching facilities. Presently the County has not imposed a fee for this use, but has considered doing so. Any future commercial fees imposed by both the County and BLM need some manner of coordination. We appreciate that Alternative E does not call for private user fees. Josephine County does not have a day-use fee for its facilities, and the Parks Board does not think it is appropriate for BLM to impose one. We recognize that there may be a future consideration of limits, permits and fees because carrying capacities have been reached. We ask that any restrictions or charges be coordinated with Josephine County.

We also appreciate that the Preferred Alternative does not consider limiting motorized drift craft use in the Hellgate Recreation Area. Any limitation of this use could result in a reduction in the amount of Oregon Marine Board gas tax money made available for maintenance of Josephine County Boat launching facilities.

Finally, we suggest two corrections to Table 2-13, Page 105. The existing boat ramp at Hog Creek is maintained by Josephine County Parks and was rebuilt in 1999. Also, there is an improved boat ramp at Griffin Park located upstream of the campground. This ramp lacks a paved road and parking lot, but is quite usable. Pavement in this area would be very subject to flood damage, therefore the County does not anticipate making these improvements. For this reason we suggest that BLM weigh plans to develop improvements at Finley Bend against the risk of flood damage.

Thank you for allowing us the opportunity to comment on the DEIS. The Josephine County Parks Advisory Board and Parks Department look forward to a close working relationship with BLM in designing the future of the Hellgate Recreation Area.

Respectfully,



Wm. Bruce Bartow

Director

Community Development

February 28, 2001

River Program
Medford District Office
Bureau of Land Management
3040 Biddle Road
Medford, OR 97504
ph 541-618-2200, fax 541-618-2400

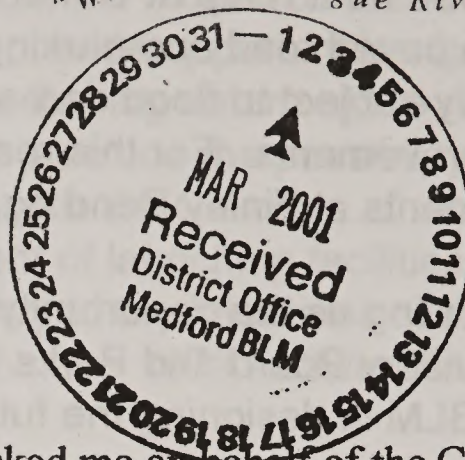
Re: Comment Interpretive Center

Dear Ladies and Gentlemen,

The City Council of the City of Grants Pass have asked me on behalf of the City to formally comment on the Bureau's proposal for improvements at Rand. These comments have been previously provided in person and by letter in conjunction with the City's desire to establish a partnership with the BLM (and potentially other government, river, and forest related organizations) to locate a large, high quality visitor-interpretive center in Grants Pass.

- A. **ADMINISTRATIVE OFFICES.** The City supports a limited addition and upgrade to the administrative buildings at Rand to support the permit issuance process.
- B. **VISITOR-INTERPRETIVE CENTER.** Although the City sees regional education and economical value to a visitor-interpretive center focusing on the Rogue River, it is opposed to locating such a facility at the Rand site. This opposition is based on 4 primary factors:
1. A facility located in Grants Pass would provide a larger customer base for current and potential river users on a year round basis, without regard to seasonal limitations and user fluctuations which would be experienced at Rand. Many people who would visit a Grants Pass interpretive center travel Interstate 5 or the Redwood Highway and would not be inclined to travel an additional 60-90 minutes out of their way if the facility was located at Rand
 2. A facility located in Grants Pass could provide the opportunity for a larger partnership to include organizations interested in the unique forest environment and wildlife in our region which would compliment river interpretations.
 3. The City of Grants Pass has Rogue River front property available at no cost to the BLM for locating such a visitor-interpretive center. The City has also offered to partner with BLM in a joint facility and contribute an additional \$250,000.
 4. Building a visitor-interpretive center at Rand is likely to have a negative impact on federal assistance in funding a center in Grants Pass.
 5. Building a visitor-interpretive center at Grants Pass would avoid the controversy surrounding the construction of new buildings in the wild and scenic section of the Rogue River.

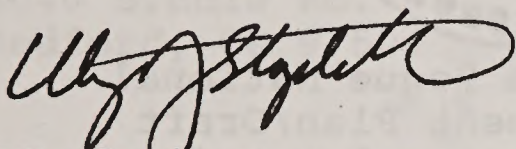
City of
Grants Pass
"Where The Rogue River Runs"



000126

We encourage the BLM to step back from the controversy and polarization associated with the current written plans and take a fresh look at the City's offer. As I previously stated in correspondence to the Bureau, our cooperation and joint assumption of goals would significantly benefit tourists, rafters, environmental groups, and taxpayers. I hope you will consider this letter in the spirit of cooperation in which it is offered. Thank you for your time and attention.

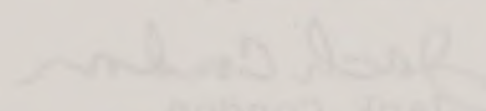
Sincerely,



Ulys Stapleton
City Attorney

cc. Mayor and City Council
William Peterson, City Manager
Senator Ron Wyden
Senator Gordon Smith
Representative Greg Walden
Grants Pass Chamber of Commerce

Sincerely,



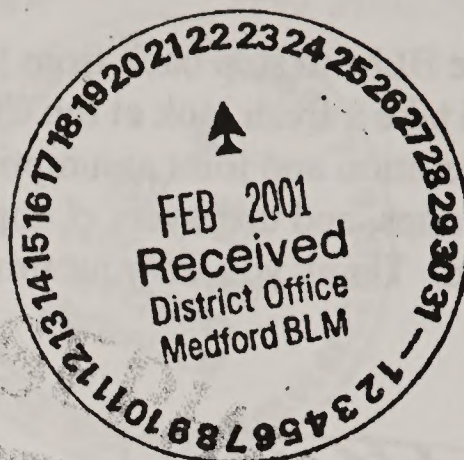
Jack Condon
President

Grants Pass and Josephine County
CHAMBER OF COMMERCE

00014
E-MAIL: gpcoc@grantspasschamber.org
WEB: www.grantspasschamber.org

February 21, 2001

Cori Cooper, Planning Team Leader
Bureau of Land Management
3040 Biddle Road
Medford, OR 97504



Dear Ms. Cooper:

Thank you for the opportunity to comment on the Rogue National Wild and Scenic River: Recreation Area Management Plan/Draft Environmental Impact Statement. The study covers a lot and we know a lot of work went into its preparation. We have a few concerns:

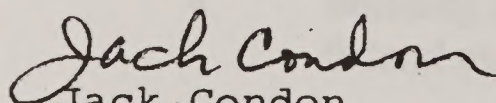
A. We believe there are ways to accomodate the concerns raised with fish spawning September 15-30, rather than stopping the tour boats with little to no notice. For example, an alternative could be directing limits on speed and routes near spawning areas. The community relies on the tourism industry to support many jobs, especially since the timber industry has been practically eliminated as a major part of the economy.

B. The requirement to phase out the larger tour boat based on the premise that it is intimidating to boaters does not track with the desire to reduce river traffic. If this boat is eliminated, there will be more boats to accommodate tourist traffic. If it is not a safety issue, it should remain available for service.

C. We believe that the Interpretative Center should be located where it is easily accessible to people traveling through the area -- in Grants Pass. But, we also understand the need to provide better facilities for boaters at Rand and support the facilities needed to provide those services.

D. The plan should be coordinated with the Josephine County Parks Department to avoid duplicating facilities and competing for the same clients. It should seek to have each agency provide those services it does best.

Sincerely,

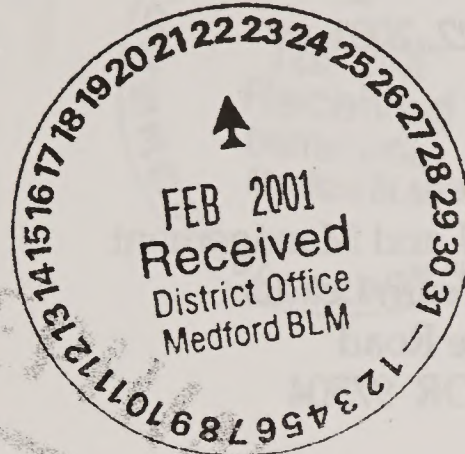

Jack Condon
President

Grants Pass and Josephine County
CHAMBER OF COMMERCE

E-MAIL: gpcoc@grantspasschamber.org
WEB: www.grantspasschamber.org

February 21, 2001

Eric Schoblom
Bureau of Land Management
3040 Biddle Rd.
Medford, OR 97504



Dear Mr. Schoblom:

Thank you for the opportunity to comment on the permit for the races on the Rogue River during Boatnik weekend.

We support the continued issuance of the permit as it has been an integral part of the very successful festival for many, many years. The Grants Pass Active Club uses the revenue from those few days of operation to support all kinds of good works in the Community.

In sum, those few days on the river provide a wonderful benefit to the area both in participation and money given to good works. The few days of inconvenience for a few river users is overshadowed by the good Boatnik does.

Sincerely,

Jack Condon

Jack Condon
President

Mark Lansing

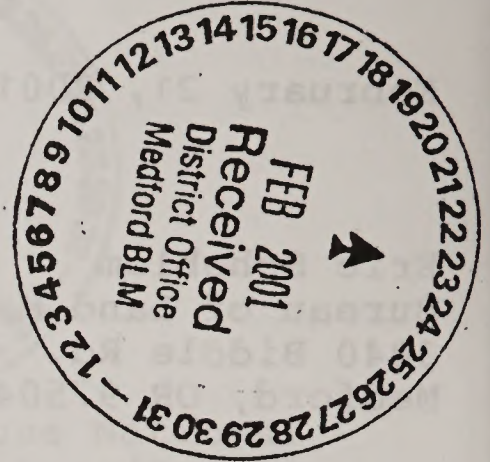
Chairperson, Grants Pass/Josephine County Bikeways Committee

242 N.W. "E" Street • Grants Pass, Oregon 97526

Phone (541) 471-9239 • Facsimile (541) 471-9288

February 22, 2001

Cori Cooper
Bureau of Land Management
Planning Team Leader
3040 Biddle Road
Medford, OR 97504



Dear Ms. Cooper:

I understand you are contemplating action with respect to the Hellgate Recreation Area, and as Chairperson of the Josephine County Bikeways Committee, I would like to make a couple of comments.

First, the Merlin-Galice Road as it runs between those towns is potentially one of the best bicycling roads anywhere. Following is a partial copy of an article I did for Oregon Cycling Magazine, touting this route.

Second, this section of road is also narrow and undulating, causing conflicts between bicycles and cars. I also have noticed that a number of people (who I suspect are locals) do not particularly like bicycles on "their" road. After Galice (heading toward Grave Creek) I have never had a problem with a car, but the surface is very uneven.

In conclusion, anything the BLM might undertake to make this beautiful road safer and better for bicycles — such as widening and stripping, or even signing the road to indicate bicyclists use it — would be highly recommended in my view.

Yours,

A handwritten signature in black ink, appearing to be "Mark Lansing".

Mark Lansing

Attachment
ML:cd



WHERE THE
ROGUE RIVER RUNS



Cori Cooper, Planning Team Leader
Bureau of Land Management
3040 Biddle Road
Medford, OR 97504

Dear Ms. Cooper:

The Grants Pass Tourism Advisory Committee would like to thank you for the opportunity to comment on the Rogue National Wild and Scenic River/Recreation Area Management Plan/Draft Environmental Impact Statement. We share a few tourism related concerns:

First, we feel that stopping tour boats on the river, with little or no notice, is far from being the best alternative for protection of fish spawning areas. We agree with other groups that the jetboats could adjust speed and direction around these areas. These tours provide much needed tourism dollars in the community and the tours provide a valuable education tool that could be broadened to provide understanding for the protection of spawning areas.

Secondly, the requirement to phase out larger tour boats would be counter productive if the desire from everyone is to reduce river traffic. It seems to us that the larger boats could be used as a tool to minimize river traffic—at times, one boat could be used instead of two.

Thirdly, we believe that the River Interpretative Center should be located in Grants Pass where it would be accessible to more people. We also understand and support the need to provide better facilities for boaters at Rand.

Sincerely,

Al Devine

Chairman, Grants Pass Tourism Advisory Committee

Mark Lansing



Bureau of Land Management
3040 Middle Road

Dear Mr. Cooper:

I am writing to you regarding the proposed project in the area of the river. The project is a large-scale development that will have significant impacts on the environment and the community. We are currently in the process of reviewing the project and will be in contact with you again in the near future.

We are currently in the process of reviewing the project and will be in contact with you again in the near future. We are currently in the process of reviewing the project and will be in contact with you again in the near future. We are currently in the process of reviewing the project and will be in contact with you again in the near future. We are currently in the process of reviewing the project and will be in contact with you again in the near future.

Thank you for your input. We are currently in the process of reviewing the project and will be in contact with you again in the near future. We are currently in the process of reviewing the project and will be in contact with you again in the near future. We are currently in the process of reviewing the project and will be in contact with you again in the near future.

Sincerely,

Al Deane

Chairman, Grand River Tourism Advisory Committee

Access - The ability of recreationists to reach areas to recreate.

Acquired lands - Lands within the Rogue Wild and Scenic River corridor obtained by the BLM under the authority of the Wild and Scenic Rivers Act. Acquired lands are closed to mineral entry.

Administrative rules - Regulations established by State agency boards and commissions in accordance with Oregon Revised Statutes.

Agricultural, forestry, commercial, or industrial sound generators - Equipment, facilities, operations, or activities employed in the production, storage, handling, sale, purchase, exchange, or maintenance of a product, commodity, or service.

Alevin - Newly hatched salmon or trout, with exterior yolk sac, residing in the gravel prior to emergence to the stream.

Allocation - Apportionment of types and levels of use to individual users at specific times; usually necessary when levels of use exceed acceptable limits and established standards.

Alluvium - Any sediment deposited by flowing water, as in a river bed, flood plain, and delta.

Alternatives - Different management options.

Ambient sound - All-encompassing sound associated with a given environment, usually consisting of a composite of sounds from various sources near and far.

Anadromous fish - Fish, such as salmon and steelhead, that migrate as adults from the ocean into fresh water streams to produce young. The young return to the ocean to grow to maturity.

Analysis file - Records of the scoping and analysis process conducted in the preparation of a NEPA document; typically stored at the BLM office that issued the final decision.

Anchoring prohibited zones - A measure to promote the safe navigation of all watercraft by prohibiting boat anchoring within a specific area of the shoreline and within a specific time frame. These zones are established and managed by the Oregon State Marine Board.

Angling enhancement zone - Specific area designed to enhance the angling watercraft recreational experience by prohibiting boat anchoring within a specific area of the shoreline during the primary fishing seasons. Most angling enhancement zones are outside the motorized tour boat season of use. The objective is for the maximum number of anglers to have an opportunity to use prime fishing holes. These zones are similar to anchoring prohibited zones, however, these zones could be accomplished through special BLM stipulations or through user education.

Annual daily schedule - An element of some alternatives that establishes a permit stipulation requiring a schedule. The purpose is to inform other users of the approximate time motorized tour boats (MTBs) plan to pass certain points on the river. The MTB permittee would provide the schedule to BLM by April 1 prior to each use season.

Applegate Reach - The upper river stretch in the Hellgate Recreation Area from the confluence of the Applegate River to Hog Creek.

Aquatic - Living or growing in or on the water.

Aquatic habitat - Standing or flowing water that satisfies survival requirements for terrestrial or aquatic species during at least a portion of their life cycle.

Archaeological site - Geographic locale containing structures, artifacts, material remains, and/or other evidence of past human activity.

Artificial structures - Constructed cavities, such as bird houses, that provide shelter for wildlife.

Back Country Byway - Vehicle routes that traverse scenic corridors utilizing secondary or back country road systems. National back country byways are designated by the type of road and vehicle needed to travel the byway.

Baseline - Starting point for analysis of environmental consequences; may be the conditions at a point in time or the average of a set of data collected over a specified number of years.

Basic site protection measures - Engineering techniques designed to reduce or control recreation impacts. In campsites, basic site protection measures could include tent pads, toilets, footpaths, steps, and vegetative plantings (see Campsite Hardening).

Big game - Large mammals that are hunted, such as Roosevelt elk, black-tailed deer, and black bear.

Biological corridor - A more or less continuous connection between habitats that allows for movement from one region to another.

BLM-administered lands - Any land or interest (e.g., property with scenic easements) in land managed by the federal government and administered by the Secretary of the Interior through the BLM.

Boat - All floating watercraft.

Boater - Any person who utilizes floating watercraft for river transportation.

Bureau assessment species - Additional species designated by a BLM State Director besides Bureau Sensitive; this species category pertains only to the states of Oregon/Washington; they are species not currently eligible for official federal or state status but are of concern in these states; they, at a minimum, need protection or mitigation in BLM activities.

Bureau sensitive species - Those species designated by State Director, usually in cooperation with a State agency responsible for managing the species and State Natural heritage programs, as sensitive. They are those species that: (1) could become endangered in or extirpated from a state, or within a significant portion of its distribution; (2) are under status review by the FWS and/or NMFS; (3) are undergoing significant current or predicted downward trends in habitat capability that would reduce species' existing distribution; (4) are undergoing significant current or predicted downward trends in population or density such that federal listed, proposed, candidate, or state listed status may become necessary; (5) typically have small and widely dispersed populations; (6) inhabit ecological refugia or other specialized or unique habitats; or (7) are state listed but which may be better conserved through application of BLM sensitive species status.

Bureau tracking species - These species are not considered as special status species for management purposes. These species may become of concern in the future, so districts are encouraged to collect occurrence data for more information to determine if species will need status within the state.

Camp areas, primitive - An area without designated campsites and specified for both day and overnight use. It does not provide improvements for visitor comfort or sanitation.

Campground, developed - An area having designated campsites and specified for both day and overnight use. It contains improvements for visitor comfort and sanitary facilities, such as toilets, drinking water, tables, and trash receptacles.

Camping - Outdoor living for recreation.

Campsite hardening - Measures to reduce camper impact on the natural resources. Example: paving a footpath (see Basic Site Protection Measures).

Campsite rehabilitation - Measures to restore damaged campsites and to prevent further damage to natural resources, such as planting grass and shrubs.

Campsite, suitable - A site with soil, vegetation, and slope conditions capable of accommodating camping use without causing significant damage to the basic resources.

Candidate species - Those plants and animals included in Federal Register Notices of Review that are being considered by the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Services (NMFS) for listing as threatened or endangered.

Casual use - Activities ordinarily resulting in negligible disturbance of federal lands and resources.

Cavity excavator - A wildlife species that digs or chips out cavities in wood to provide a nesting, roosting, or foraging site.

Cavity nester - A wildlife species that nests in cavities.

Chemical spills - Accidental releases of chemical products that have the potential for damaging natural or human resources.

Client - A paying member of a guided or outfitted group.

Commercial use - The use of public lands and related waters for business or financial gain.

Commodity resources - Goods, products, or services of economic use or value.

Community stability - Capacity of a community (incorporated town or county) to absorb and cope with change without major hardship to institutions or groups within the community.

Concern - A management topic of public interest that is not well enough defined to become a planning issue and does not involve either controversy or dispute over resource management activities or allocations nor lend itself to designating management alternatives. A concern may be addressed in analysis, background documents, procedures, or a noncontroversial decision.

Congressionally-designated areas - Areas that require congressional enactment for their establishment, such as National Wilderness Areas, National Wild and Scenic Rivers, and National Recreation Areas.

Conservation release season - Time for releasing water either stored or held back during the conservation storage season. The release season is based upon stream flow and temperature objectives, primarily for fishery enhancement. Release for Applegate and Lost Creek reservoirs, as set by the United States Army Corps of Engineers, is May 1 through October 31.

Conservation storage season - Time when water is stored or held back for release at later time to meet water needs for fishery enhancement, irrigation, or municipal and domestic water uses. Storage season for Applegate and Lost Creek reservoirs, as set by the United States Army Corps of Engineers, is February 1 through April 30. Storage allocations during the conservation season total 180,000 acre feet (125,000 acre feet for fishery enhancement; 35,000 acre feet for future irrigation needs; and 20,000 acre feet for future municipal and domestic water needs).

Consistency - The adherence, under the Federal Land Policy and Management Act, of BLM resource management plans to the terms, conditions, and decisions of officially approved and adopted resource related plans or, in their absence, with policies and programs of other federal agencies, state and local governments, and Indian tribes, so long as the plans are also consistent with the purposes, policies, and programs of federal laws and regulations applicable to BLM-administered lands.

Council of Environmental Quality (CEQ) - An advisory council to the President established by the National Environmental Policy Act of 1969. It reviews federal programs for their effect on the environment, conducts environmental studies, and advises the President on environmental matters.

County lands - Any land or interest in land managed by a specific county, such as Josephine County for this plan.

Crucial habitat - Habitat that is basic to maintaining viable populations of fish or wildlife during certain seasons of the year or specific reproduction periods.

Cultural resources - Remains of human activity, occupation, or endeavor reflected in archaeological or historic districts, sites, structures, buildings, objects, artifacts, ruins, works of art, and architecture; and natural features of importance in past human activities and cultural practices. Cultural resources consist of: (1) physical remains; (2) locations of significant human events in the past, or locations for traditional cultural practices, even though physical evidence of those events and practices may not exist; and (3) those elements of the natural setting that contribute to a site's historic cultural significance.

Daily use - Time of day when a permitted activity is prescribed to occur.

Day-use area, developed - An area designated as day-use only. It contains improvements for comfort and sanitation, such as toilets, drinking water, tables, and trash receptacles.

Day-use area, primitive - An area designated as day-use only, but without improvements for comfort or sanitation.

Day-use parking pass - An annual permit required by the BLM when parking in BLM-administered day-use areas, including camping areas, within the Hellgate Recreation Area.

Dedicated fund - A common pool of monies from fees collected by all the managing agencies and only expended for the benefit of the resources and users of the Hellgate Recreation Area. BLM's participation would require congressional legislation.

Dispersed recreation - Outdoor activities that occur over relatively large areas. Facilities or developments are provided primarily for access and protection of the environment rather than user comfort or convenience.

Diversity - The distribution and abundance of different plant and animal communities and species within an area.

Dunn Reach - The portion of the Rogue River within the Hellgate Recreation Area from Hog Creek to Grave Creek.

Economic impact area - For purposes of this plan, Jackson and Josephine counties.

Economic impact coefficients - Factors affecting the economy, such as dollars earned and/or spent and jobs created and/or abolished. Dollar and job coefficients were developed for every 10,000 visitors in several different recreational activity types and lodging types within the Hellgate Recreation Area. For example, the job coefficient for every 10,000 private floaters is 2.69; 10.76 jobs would be created in Jackson and Josephine counties for 40,000 private floaters using the recreation area in one year.

- Economic input-output model** - A model showing linkages between sectors of an economy, including exports from the economy. The model is useful in evaluating how changes in final demand affect the total economy activity within an impact area.
- Effects** - Impacts or consequences occurring directly, indirectly, or cumulatively in the following categories: aesthetic, historic, cultural, economic, social, health, or ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems).
- Cumulative Effects** - Environmental impact which results from the incremental impact of the identified actions when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative effects can result from individually minor, but collectively significant, actions occurring over a period of time.
- Direct Effects** - Impacts caused by the action and occur at the same time and place.
- Indirect Effects** - Impacts caused by the action and occur later in time and place, or farther removed in the distance, but are still reasonably foreseeable.
- Endangered species** - Any species in danger of extinction throughout all or a significant portion of its range, and identified by the Secretary of the Interior as endangered in accordance with the 1973 Endangered Species Act.
- Environmental analysis** - An evaluation of alternative actions and their predictable short-term and long-term environmental effects, incorporating physical, biological, economic, and social considerations.
- Environmental assessment** - A concise public document that analyzes the environmental impacts of a proposed federal action and provides sufficient evidence to determine the level of significance of the impacts.
- Environmental impact** - The positive or negative effect of any action upon a given area or resource as measured relative to the existing condition.
- Environmental impact statement (EIS)** - A detailed written statement required by the National Environmental Policy Act when an agency proposes a major federal action significantly affecting the quality of the human environment.
- Ephemeral streams** - Streams that contain running water only sporadically, such as during and following storm events.
- Erosion** - Detachment and movement of soil or rock fragments by water, wind, ice, gravity, people, watercraft, and vehicles.
- Erosion sensitive areas** - Areas of riverbank having limited or severe erosion potential.
- Extensive recreation management areas (ERMAs)** - All BLM-administered lands outside special recreation management areas, possibly including developed and primitive recreation sites with minimal facilities.
- Fall chinook spawning area** - An element of some alternatives to inventory and manage specific areas where fall chinook spawn.
- Fire hazard** - A fuel complex defined by kind, arrangement, volume, condition, and location that forms a threat of ignition, spread, and difficulty of suppression.

Fire protection - Prevention efforts to protect an area from wildfire, including public contact, patrol, sign posting, and regulated use closures.

Fire risk - The chance of potential ignition sources to cause a fire that threatens valuable resources, property, or life.

First mate - Additional person on a motorized tour boat to assist the boat operator.

Fish-bearing streams - Stream that has fish present for a portion of the year as part of their life cycle.

Float-in campsite - A campsite accessible only by watercraft. Minimum development is a toilet; maximum development may include toilets, fire pits, picnic tables, and trash cans.

Flood plain - The relatively flat area or lowlands adjoining a body of standing or flowing water, which has been or might be covered by floodwater.

Flood season - Most likely time for an area to flood. For the Rogue River, usually from November 1 through January 31.

Fry - Tiny fish, measuring approximately 1-inch long, that emerge from the gravel after the alevins deplete their yolk sac. Fry stay in calm pools of water to search for food.

Goal - The purpose of directing an effort.

Gravel recruitment - Downstream movement of gravel caused by high volume of water flow.

Ground cover - Grasses or other plants that stabilize soil, preventing the soil from being blown or washed away.

Group - Motorized tour boats trips scheduled to travel together to limit the duration of encounters with other users.

Group/party size - The number of people in a boating or camping trip, including guides and any support personnel.

Guide - A person who, for a fee, provides services by leading one or more persons in outdoor recreation activities.

Guide permit - A license issued by the Oregon State Marine Board to provide guide services.

Habitat - A specific set of physical conditions that surround a species, group of species, or a large community.

Hellgate Recreation Area - A 27-mile corridor of the Rogue River, from approximately its confluence with the Applegate River to Grave Creek, determined by Congress to meet the objectives for a recreational river in the National Wild and Scenic Rivers System. The area encompasses about 5,500 acres of BLM-administered land (see Wild and Scenic Rivers System).

Historic site - Areas or sites relating to European, American, and Asian immigrants in southwest Oregon.

Impact - Environmental consequences (the scientific and analytical basis for comparison of alternatives) as a result of a proposed action.

Indicator species - A prevalent species which can be used for the purpose of observing impacts to that one species and similar species.

Instream water right - A legal right to the use of water that remains in the stream, such as for fish, recreation, or pollution abatement.

Interdisciplinary team - A group of individuals, each knowledgeable in various disciplines, who are assembled to solve a problem or perform a task. This team concept recognizes that no single discipline is sufficiently broad enough to adequately analyze the situation and propose actions (see Alternatives).

Interim stipulation - Temporary guidance to protect resource values until guidelines are established through the planning process.

Intermittent stream - A stream that flows most of the time, but occasionally is dry or reduced to pools.

Interpretive services - Methods of putting information into a form that visitors have the ability and desire to understand.

Issue - A subject or question of widespread public discussion or interest regarding management of a geographic area, usually identified during scoping and addressed in alternative design. Issues can be unresolved questions about management actions and/or a resource use that may have significant or unacceptable environmental impacts.

Landing site - Riverbank location where boats are taken from the river.

Launch site - Riverbank location where boats are placed on the river.

Leave No Trace - A national public education program that strives to teach outdoor recreationists how to minimize their impacts on the environment.

Level of Service (LOS) - A qualitative measure describing operational conditions within a traffic stream, generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.

Light scattering - the sum of the scattering caused by gasses and the scattering caused by suspended particles in the atmosphere.

Limited entry system - A system that restricts the number of participants in an activity to meet certain management objectives.

Listed species - A species officially listed as threatened or endangered by the Secretary of the Interior under the provisions of the ESA.

Locatable minerals - Minerals (including valuable deposits of gold, silver, and other uncommon minerals) subject to exploration, development, and disposal by staking mining claims as authorized by the Mining Law of 1872 (as amended).

Long-term - The period starting 10 years beyond initial implementation of the revised Hellgate Recreation Area Management Plan.

Management presence - Means of conveying to visitors which agency manages an area. The most common form of management presence is onsite uniformed personnel.

Mineral estate - The ownership of minerals, including rights necessary for access, exploration, development, mining, ore dressing, and transportation operations.

Mineral withdrawal - A formal order that withholds federal lands and minerals from entry under the Mining Law of 1872 and closes the area to mineral location (staking mining claims) and development.

Minimum streamflow - Quantity of water needed to maintain existing and planned in-place uses of water in or along a stream channel or other water body and to maintain the natural character of the aquatic system and its dependent systems.

Mining claims - Portions of public lands claimed for possession of locatable mineral deposits by locating and recording under established rules and pursuant to the 1872 Mining Law.

Mitigating measures - Methods or procedures that reduce or lessen the impacts of an action.

Monitoring/evaluation - The periodic observation and orderly collection of data on 1) changing conditions of public land related to management actions and 2) the effects of implementing decisions.

Motor vehicle - Any self-propelled vehicle, including motorized boats and aircraft.

Motorboat sound levels - Levels of sound (measured in decibels by a stationary test) that are emitted during operation of motorboat engines. The maximum allowed is 90 dBA for engines manufactured prior to January 1, 1993 and 99 dBA for engines manufactured that date or later (see Sound level/loudness), with exemptions possible for special activities, such as regattas, boat races, or speed trials.

Motorized boating - Boating that involves motorized watercraft, regardless of the motor's horsepower rating. The "kicker" (a small horsepower motor) presently used by some drift boat anglers is considered motorized.

Motorized fishing boat - Motorized fishing craft for commercial use. The boat operator is usually an "operator of an uninspected passenger vessel" (OUPV). A "six pack" or an OUPV license is required of fishing guides or charter vessel operators to carry six or fewer paying passengers. The U.S. Coast Guard issues the licenses.

Motorized tour boat (MTB) - Any motorized boat carrying seven or more paying passengers. An MTB operator must have at least a "limited master's" license issued by the U.S. Coast Guard. All MTBs have been issued a certificate of inspection (COI) by the Coast Guard. The COI lists conditions that MTBs must satisfy to comply with applicable laws, rules, and regulations relating to safe construction, equipment, manning, and operation. The COI also requires MTBs be in a seaworthy condition for the services they are operated.

Multiple use - The use of land or water resources for more than one purpose, such as angling, floating, motorized boating, and homeowner activities.

National Environmental Policy Act of 1969 (NEPA) - An act that encourages productive and enjoyable harmony between humankind and the environment, promotes efforts that prevent or eliminate damage to the environment and biosphere, stimulates the health and welfare of humanity, enriches the understanding of the ecological systems and natural resources important to the nation, and establishes a Council on Environmental Quality.

National Register of Historic Places (NRHP) - A register of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, and culture, established by the "Historic Preservation Act" of 1966 and maintained by the Secretary of the Interior.

National Wild and Scenic Rivers System - A system of nationally designated rivers and their immediate environments that have outstanding scenic, recreational, geologic, fish and wildlife, historic, cultural, and other similar values and are preserved in a free-flowing condition. The system consists of three types of

streams: (1) recreation—rivers or sections of rivers that are readily accessible by road or railroad and that may have some development along their shorelines and may have undergone some impoundments or diversion in the past, (2) scenic—rivers or sections of rivers free of impoundments with shorelines or watersheds still largely undeveloped but accessible in places by roads, and (3) wild—rivers or sections of rivers free of impoundments and generally inaccessible except by trails, with watersheds or shorelines essentially primitive and waters unpolluted.

Native species - Plants or animals that are natural to an area.

Noise - Any sound that is unwanted by the listener, presumably because it is unpleasant or bothersome, interferes with the perception of the wanted sound, or is physiologically harmful.

Noise standards - Measurements of sound used to determine the point at which sound becomes unpleasant or bothersome to humans.

Noncommercial - Activity with bona fide cost sharing among all participants (see Private use).

Nongame wildlife - All wild vertebrate and invertebrate animals not subject to sport hunting or trapping (furbearers).

Nonmotorized boating - Boating that involves use of a watercraft without any type of motor.

No anchor zone - See Anchoring prohibited zone.

Notice of display - A stipulation of motorized tour boats requiring them to inform other users of the number of boats in a group and their sequence. The notice must be legible from both riverbanks.

No-wake zone - An area where boat speed is reduced to 5 mph or less to minimize the wake. In these zones, boats are to proceed off plane and at such a speed so that a minimal wake is generated. No-wake zones are intended to minimize soil erosion in erosion sensitive areas and are in place near swimming areas, near people working at water level, and at boat ramps to prevent disturbance to others.

Noxious plant - A plant species designated by Federal or State law as generally possessing one or more of the following characteristics: aggressive and difficult to manage; parasitic; a carrier or host of serious insects or disease; or nonnative, new, or not common to the United States.

Number of trips - Part of alternative design that refers to watercraft trips; round trips for motorized tour boats, either one-way or round for other motorized watercraft, and one-way trips for nonmotorized float craft.

Number of visitors - Estimated annual number of visitors resulting from the different alternatives, but not part of alternative design. The number of visitors is an environmental consequence.

O & C lands - Public lands granted to the Oregon and California Railroad Company and subsequently reverted to the United States.

Objectives - A description of a desired condition for a resource. Objectives can be quantified and measured and, where possible, have established time frames for achievement.

Off-highway vehicle (OHV) - Off-highway vehicles, as addressed by Oregon Revised Statute, Chapter 821, is any unlicensed vehicle designed for cross-country travel or other natural terrain. These vehicles are classified into three different categories: Class I - vehicles less than 50 inches wide with three or more low pressure tire, commonly referred to as a "quad"; Class II - a vehicle that weighs between 800 and 8,000 pounds, commonly referred to as a "dune buggy"; and Class III - a vehicle weighing less than 600 pounds and travels on two tires, commonly referred to as a "dirt bike". Any motorized vehicle capable of, or

designed for, travel on or immediately over land, water, or other natural terrain, excluding emergency vehicles and vehicles in official use.

Off-highway vehicle designations -

Open - Designated areas and trails where off-highway vehicles may be operated subject to operating regulations and vehicle standards set forth in BLM Manuals 8341 and 8343.

Limited - Designated areas and trails where off-highway vehicles are subject to restrictions limiting the number or types of vehicles, date and time of use; limited to existing or designated roads and trails.

Closed - Areas and trails where off-highway vehicles are permanently or temporarily prohibited, except for emergency use.

Off-plane area - An area where boats are required to slow down. Boats proceed off plane at a safe speed where wake is not a critical factor in areas of heavy traffic or where passage is narrow.

Onsite management - Regulations, restrictions, facilities, policies, services, or controls that limit or influence how people use an area or resource.

Oregon scenic waterways - Waterways selected, per the Oregon Scenic Waterways Act of 1970, for protection or enhancement of special river attributes. The act was initiated by a citizens' initiative and places primary emphasis on aesthetic, scenic, fish and wildlife, scientific, and recreational features. An 84-mile reach of the Rogue River, from the Applegate River downstream to Lobster Creek Bridge, was one of the original six scenic waterways. Administration of scenic waterways, including a distance of one-quarter mile from each riverbank, is mandated to maintain the existing character of the river environment.

Outfitter - A commercial dealer providing guides, equipment, or supplies for outdoor recreational activities, including angling, camping, fishing, and floating.

Outstandingly remarkable values (ORV) - Section 10(a) of the WSRA states that: "Each component of the National Wild and Scenic Rivers System shall be administered in such a manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration, primary emphasis shall be given to protecting its aesthetic, scenic, historic, archaeological, and scientific features. Management plans for any such component may establish varying degrees of intensity for its protection and development, based on the special attributes of the area."

Paleontological resource - The physical remains of plants and animals preserved in soils and sedimentary rock formations. Paleontological resources are important for understanding past environments, environmental change, and the evolution of life.

Partnerships - Two or more individuals or groups in cooperation with one another because of a common interest in a river resource or some management facet. The cooperation may involve issue identification, inventories and studies, alternative design, ownership, funding, staffing, and management.

Pass-through zone - An area of streambank where boaters are prohibited from stopping as a means of enhancing the safe navigation of all watercraft in an area. In this defined length of the river, all floating watercraft are prohibited from anchoring, stopping, or holding from August 1 through September 30.

Passerine birds - Birds of the order Passeriformes, which includes perching birds and songbirds such as black birds, jays, finches, warblers, and sparrows. More than half of all birds belong to this order.

Peak flow - The highest amount of stream or river flow occurring in a year or from a single storm event.

Perennial stream - A stream that typically has running water on a year-around basis.

Performance evaluation - An annual evaluation conducted by BLM on the professional performance of a permittee (outfitter) as a means of assuring compliance with permit stipulations and regulations concerning public safety.

Permit system - A method of regulating use of a public resource through issuance of permits.

Permittee - An outfitter who holds a permit issued by BLM to use BLM-administered land or water for financial gain.

Personal income - The sum of wage and salary disbursements, other labor income, proprietors' income, rental income of persons, personal dividend income, personal interest income, and transfer payments to persons, less personal contributions for social insurance.

Personal watercraft - A small class "A" motorboat that: 1) uses an outboard motor or an inboard motor powering a water ski pump as its primary source of power; and 2) is designed to be operated by a person sitting, standing, or kneeling on a vessel unlike the conventional manner of sitting or standing inside a vessel; includes jet skis. Personal watercraft are prohibited in the Hellgate Recreation Area and are regulated by OSMB.

pH - A measure of acidity or hydrogen ion activity. Neutral is pH 7.0. All values below 7.0 are acidic, and all values above 7.0 are alkaline.

Plan - A document that contains a set of comprehensive, long range decisions concerning the use and management of Bureau administered resources in a specific geographic area.

Plan amendment - A change in the terms, conditions, or decisions of a resource management plan.

Plan maintenance - Any documented minor change that interprets, clarifies, or refines a decision within a resource management plan, but does not change the scope or conditions of that decision.

Planning area - A geographical area for which plans are developed and maintained. BLM planning decisions apply only to BLM-administered lands and mineral estate.

Planning issue - See Issue.

Prehistoric - The period wherein Native American cultural activities took place which were not yet influenced by contact with historic nonnative culture(s).

Prescribed fire - The introduction of fire to an area under regulated conditions for specific management purposes.

Presuppression - All actions involved in the location or allocation of suppression resources in order to be prepared to suppress wildland fires.

Private motorized boating - Noncommercial motorized boating.

Private use - The use of public lands and related waters in which there is no business involvement or financial gain (see Noncommercial).

Proposed species - Plant, animal, or fish species that have been officially proposed for listing as threatened or endangered by the Secretary of the Interior. A proposed rule has been published in the *Federal Register*.

Public contact person - An individual assigned to provide information to the public in person.

Public domain lands - Original holdings of the United States that were never granted or conveyed to other jurisdictions or that were reacquired by exchange for other public domain lands.

Public lands and related waters - Lands and interest in lands administered by the BLM. Related waters are waters that lie directly over or adjacent to public lands and require some management control to protect federally-administered resources or to provide for enhanced visitor safety (see BLM-administered lands).

Racing-motorboat testing areas - Areas on the river where tests of racing motorboats are allowed.

Raptor - Birds of prey with sharp talons and strongly curved beaks, such as hawks, owls, vultures, and eagles.

Rearing habitat - Areas in rivers or streams where juvenile salmon and trout find food and shelter to live and grow.

Recovery plan - A management strategy for the conservation and survival of an endangered or threatened species listed under the Endangered Species Act, the purpose being to improve the status of the species to make continued listing unnecessary.

Recreation - Use of leisure time to provide personal satisfaction and enjoyment and contribute to the renewal and refreshment of one's body, mind, and spirit.

Recreational river - See National Wild and Scenic Rivers System.

Recreation opportunity spectrum (ROS) - A framework for stratifying and defining classes of outdoor recreation environments, activities, and experience opportunities. The settings, activities, and opportunities for experiences are arranged along a continuum or spectrum divided into six classes: primitive, semiprimitive nonmotorized, semiprimitive motorized, roaded natural, rural, and urban. The resulting analysis defines specific geographic areas on the ground, each of which encompasses one of the six classes.

Recreation site - A setting that provides an opportunity for enjoying the outdoors.

Redd - The spawning ground or nest of various fishes.

Resource management plan (RMP) - A land use plan prepared by the BLM under current regulations in accordance with the Federal Land Policy and Management Act.

Right-of-way - A permit or a easement which authorizes the use of public lands for certain specified purposes, commonly for pipelines, roads, telephone lines, electric lines, reservoirs, and communication sites; also, the lands covered by such an easement or permit.

Riparian area - A geographic area containing an aquatic ecosystem and adjacent upland areas that directly affect it. This includes floodplain, woodlands, and all areas within a horizontal distance of approximately 100 feet from the normal line of high water of a stream channel or from the shoreline of a standing body of water.

Riparian reserve - Designated riparian areas found outside the Late-Successional Reserves.

River community areas - Areas identified and managed by the Oregon State Parks and Recreation Department under the Oregon Scenic Waterways system. River community areas within the Hellgate Recreation Area include platted subdivisions and plotted tracts existing in 1970.

River ranger - A uniformed person with citation authority assigned to do law enforcement on BLM-administered land or water within the Hellgate Recreation Area.

River reach - An element that divides the Rogue River into the Applegate Reach and the Dunn Reach for the purpose of analysis and management in the Hellgate Recreation Area. The Applegate Reach is the upper river stretch, at the start of the Hellgate Recreation Area (a small distance upstream of the Applegate River) to Hog Creek. The Dunn Reach is the lower river stretch from Hog Creek to the Grave Creek Boat Landing.

Rogue River studies program - A comprehensive studies program, including contracted and agency inventories and studies, that represents the facts of the planning process used in revising the Hellgate Recreation Area Management Plan.

Rural interface areas - Areas where BLM-administered lands are adjacent to or intermingled with privately-owned lands that either already have residential development or are zoned for 1- to 20-acre lots.

Safety sites of concern (SOC) - An element of some alternatives that identifies areas on the Rogue River between Grants Pass and Grave Creek having boating safety concerns. Examples: channels that limit watercraft operational options; and bank conditions that limit line-of-sight.

Salmonid - Any fish of the Salmonidae family, including salmon and trout.

Scenic quality - Relative worth of a landscape from a visual perception.

Scenic river - See National Wild and Scenic Rivers System.

Scoping - Process of identifying the range of issues, management concerns, preliminary alternatives, and other components of an environmental impact statement or land-use planning document. It involves both internal and public viewpoints.

Season of use - Part of the year when an activity may occur.

Sediment - Soil, rock particles, and organic or other debris carried from one place to another by wind, water, or gravity.

Sensitive wildlife habitat - Habitat, such as riparian areas, that are crucial to wildlife for nesting, rearing, feeding, or cover.

Short-term - Period of time during which the revised Hellgate Recreation Area Management Plan will be implemented; assumed to be 10 years.

Shuttle driver - A person who shuttles people or equipment (e.g., personal vehicles and watercraft) for a fee.

Shuttle service - Hauling of people, boats, vehicles, or other equipment for a fee.

Smoke management - Conducting a prescribed fire under suitable fuel moisture and meteorological conditions and with firing techniques to contain smoke impact on the environment within designated limits.

Socioeconomic impacts - Employment and income effects of different management options.

Sound frequency/hertz - Frequency is the rapidity or slowness of air vibrations (sound) that determines the sound's basic quality; the alternate push and relaxation against air is expressed as cycles per second (cps) or hertz (Hz).

- Sound level/loudness** - Weighted sound pressure level measured by use of a sound meter with an "A" frequency weighing scale, which most closely approximates what the human ear hears; reported as decibels.
- Sound sensitive area** - Area where sound is managed. Management could be through special BLM stipulations for commercial users and/or education for private users.
- Sound sensitive property** - Property that is sound sensitive, such as residential property or property used for schools, churches, hospitals, public libraries, or other property that meets these criteria in more than an incidental manner.
- Special recreation management area (SRMA)** - Areas which require explicit recreation management to achieve recreation objectives and provide specific recreation opportunities. The BLM-administered portion of the National Wild and Scenic Rogue River is a SRMA.
- Special status species** - Includes proposed species, listed species, and candidate species under the ESA; State-listed species; and BLM State Director-designated sensitive species.
- Species diversity** - The number, different kinds of, and relative abundances of species present in a given area.
- Stakeholders** - Individuals or groups with an interest in a river resource or in some aspect of river management (see Partnerships).
- Standard** - A description of the physical and biological conditions or degree of function required for healthy, sustainable lands.
- State Historic Preservation Officer** - The state official designated to coordinate state historic preservation programs, including identification and nomination of eligible properties to the National Register and cooperation with federal agencies to ensure implementation of the National Historic Preservation Act of 1966.
- State lands** - Land or interest in land managed by a government agency for the State of Oregon.
- State listed species** - Species listed by a state in a category implying, but not limited to, potential endangerment or extinction. Listing is either by legislation or regulation.
- Statewide Comprehensive Outdoor Recreation Plan (SCORP)** - A plan prepared by the Oregon State Parks and Recreation Department that describes and analyzes the organization and function of the state's outdoor recreation system, including an analysis of the roles and responsibilities of major outdoor recreation suppliers; an analysis of demand, supply, and needs; issue discussions; an action program to address the issues; and a project selection process.
- Stewardship** - Responsible care of land, water, other natural resources, or recreational resources.
- Stream class** - A stream classification system established in the Oregon Forest Practices Act. Class I streams are significant for: domestic use; angling; water dependent recreation; and spawning, rearing, or migration of anadromous or game fish. All other streams are Class II.
- Streamflow levels and instream water rights** - Minimum streamflows and instream water rights can be set to minimize the effects of pollution and for maintaining recreational uses. Minimum streamflows were set for the Rogue River, including the Hellgate Recreation Area, for recreation, fish, and wildlife.
- Stream order** - A stream classification system based on the number of tributaries a stream has. The smallest unbranched tributary in a watershed is designated an Order 1 stream. A stream formed by the confluence of two Order 1 streams is designated an Order 2 stream. A stream formed by the confluence of two Order 2 streams is designated an Order 3 stream, and so on.

- Threatened species** - Any plant or animal species defined under the Endangered Species Act as likely to become endangered within the foreseeable future throughout all or a significant portion of its range; listings are published in the *Federal Register*.
- Threshold** - Factors that limit use over time or space, including ecological or resource, physical or space, facility, or social constraints—all of which can fluctuate as social and environmental factors change.
- Thrill power maneuver** - Powerboat movement that is not necessary for navigation, but is conducted to enhance the passenger's experience.
- Thrill power maneuver areas** - Areas where thrill power maneuvers are identified as appropriate. These areas would be outside of erosion sensitive areas, no-wake zones, sound sensitive areas, boat ramps, and designated swimming areas
- Traditional uses** - Types of recreational activities occurring in 1968 when the National Wild and Scenic Rivers Act was passed.
- Travel corridor** - A route that allows more or less uninhibited movement of animals from one region to another.
- Turbidity** - An interference to the passage of light through water due to insoluble particles of soil, organics, microorganisms, and other materials.
- Unique ecosystems** - Ecosystems that have special habitat features, such as talus slopes, meadows, and wetlands.
- Use limits** - The amount and type of recreational use an area can accommodate without altering either the environment or the user's experience beyond the degree of change deemed acceptable by management objectives for the area.
- User fee** - A fee assessed all visitors by watercraft or vehicle, both commercial and private, for the cost of managing the recreational river resources and providing facilities.
- Vehicles Per Hour (VPH)** - The number of vehicles that pass any given point in one hour.
- Viability** - Ability of a wildlife or plant population to maintain a specific population for a specified length of time.
- Viable population** - A wildlife or plant population that contains an adequate number of reproductive individuals appropriately distributed to ensure the long-term existence of the species.
- Visitor services** - Methods of providing information to the public on outdoor recreation opportunities, local natural and cultural history, regulations, use guidelines, and safety. Services emphasize protecting and maintaining resources, protecting visitors, promoting wise use, reducing conflicts between users or types of use, encouraging visitor cooperation and involvement in managing public lands, and increasing visitor understanding and support of multiple-use management.
- Visitor use** - Number and type of visitors, both commercial and private, classified as activity and lodging types:
- Activity types** - Motorized tour boats, private floats, guided floats, private bank anglers, private boat anglers, guided anglers, day-use, BLM and Josephine County campgrounds, lodging, and miscellaneous.
- Lodging types** - Hotel/motel, campsite, family/friends, and day-use only.

Visitor use day - Use of all or part of a day by a visitor.

Visitor use, primary season - Time of year when most visitor days or watercraft days occur; May 1-September 30 in the Hellgate Recreation Area.

Visitor use, secondary season - Time of year outside of the primary visitor use season; October 1-April 30 in the Hellgate Recreation Area.

Visual management classes - Four categories (I, II, III and IV) assigned to BLM lands based on scenic quality, sensitivity level, and distance zones—each having an objective that prescribes the amount of modification allowed in the landscape.

Visual resources - The visible physical features of a landscape (topography, water, vegetation, animals, structures, and other features) that constitute the scenery of an area.

Visual resource management (VRM) - Inventory and planning actions to identify visual values and to establish objectives and design management for protecting those values.

Watercraft day - One watercraft used for all or part of a day by one or more persons.

Water quality - Chemical, physical, and biological characteristics of water with respect to its suitability for a particular use.

Wetlands - Areas that are inundated or saturated by surface or ground water often and long enough to support and, under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Wildfire - Any unwanted wildland fire.

Wild river - See National Wild and Scenic Rivers System.

Withdrawal - An action that restricts the use of public lands by removing them from the operation of some or all of the public land or mining laws.

Bibliography

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.
12.
13.
14.
15.
16.
17.
18.
19.
20.
21.
22.
23.
24.
25.
26.
27.
28.
29.
30.
31.
32.
33.
34.
35.
36.
37.
38.
39.
40.
41.
42.
43.
44.
45.
46.
47.
48.
49.
50.
51.
52.
53.
54.
55.
56.
57.
58.
59.
60.
61.
62.
63.
64.
65.
66.
67.
68.
69.
70.
71.
72.
73.
74.
75.
76.
77.
78.
79.
80.
81.
82.
83.
84.
85.
86.
87.
88.
89.
90.
91.
92.
93.
94.
95.
96.
97.
98.
99.
100.

- Agee, J.K. 1981. *Fire Effects on Pacific Northwest Forests: Flora, Fuels, and Fauna*, p.54-66. In Proc., Northwest Fire Council.
- Agee, J.K. 1990. *The Historical Role of Fire in Pacific Northwest Forests*. In Walstad, J., et al. (eds.), *Natural and Prescribed Fire in Pacific Northwest Forests*: pp.25-38. Oregon State University Press. Corvallis, OR.
- Anthony, R., F. Isaacs, and K. McGarigal. 1991. *Interactions of Humans and Bald Eagles on the Columbia River Estuary*. Wildlife Monographs; A Publication of the Wildlife Society.
- Atzet, T. and D.L. Wheeler. 1982. *Historical and Ecological Perspectives on Fire Activity in the Klamath Geological Province of the Rogue River and Siskiyou National Forests*. 16 p. USDA-Forest Service, Pacific Northwest Region. Portland, OR.
- Atzet, T., D.L. Wheeler and R. Gripp. 1988. *Fire and Forestry in Southwestern Oregon*, p. 4-7. In Forest Intensified Research Report Vol. 9, No. 4, Winter 1988. 24 p. Oregon State University Extension Service. Corvallis, OR.
- Atzet, T., et al. 1996. *Field Guide to the Forested Plant Associations of Southwestern Oregon*. USDA Forest Service, Pacific Northwest Region. Technical Paper R6-NR-ECOL-TP-17-96.
- Austermuehle, L. 1992. *Compliance Background Paper for Revising the Hellgate Recreation Area Management Plan*. United States Department of Interior, Bureau of Land Management, Medford District Office, Grants Pass Resource Area. Medford, OR.
- Austermuehle, L. 1995. *Revised Visitor Use Background Paper for Revising the Hellgate Recreation Area Management Plan*. United States Department of Interior, Bureau of Land Management, Medford District Office, Grants Pass Resource Area. Medford, OR.
- Austermuehle, Louise. 1997. *Visitor Use Projections for 2007 by Activity Type*. Medford District Office, Bureau of Land Management. Internal Working Document.
- Bell, M.C. 1986. *Artificial Spawning Channels*. In fisheries handbook of engineering requirements and biological criteria; fish passage development and evaluation program. Corps of Engineers, North Pacific Division. Portland, OR.
- Berry, K.H. 1980. *A Review of the Effects of Off-road Vehicles on Birds and Other Vertebrates*. In workshop proceedings: Management of Western Forests and Grasslands of Nongame birds. Salt Lake City, UT.
- Bessey, B. 1993. *Fishery Resources Background Paper for Revising the Hellgate Recreation Area Management Plan*. United States Department of Interior, Bureau of Land Management, Medford District Office, Grants Pass Resource Area. Medford, OR.
- Bottom, D.L., P.J. Howell, and J.D. Rodgers. 1985. *The Effect of Stream Alterations on Salmon and Trout Habitat in Oregon*. Oregon Department of Fish and Wildlife.
- Brown, B. 1993. *Existing Recreation Facilities Background Paper for Revising the Hellgate Recreation Area Management Plan*. United States Department of Interior, Bureau of Land Management, Medford District Office, Grants Pass Resource Area. Medford, OR.
- Bury, R.B., R.A. Luckenbach, and S.D. Busack. 1977. *Effects of Off-road Vehicles on Vertebrates in California*. United States Department of Interior, Fish and Wildlife Service.
- Bush, J. 1988. *Relative Physical Impacts of Jet Boats, Prop Boats and Canoes in an Ozark Stream*. Missouri Department of Conservation.

Bibliography

- Christy, J.A. and D.A. Wagner. 1996. *Guide for the Identification of Rare, Threatened or Sensitive Bryophytes in the Range of the Northern Spotted Owl, Western Washington, Western Oregon, and Northwestern California*. USDA Forest Service, USDI Bureau of Land Management, The Nature Conservancy, Northwest Botanical Institute.
- Cole, D.N. and W.E. Hammitt. 1987. *Wildland Recreation: Ecology and Management*. John Wiley and Sons, Inc. New York.
- Countryman, C. 1972. *The Fire Environment Concept*. 12 p. USDA Forest Service, PSW Forest and Range Experiment Station. Berkeley, CA.
- Cramer, S.P., et al. 1985. *Lost Creek Dam Fisheries Evaluation Phase I Completion Report*. Volume I. Impacts of Lost Creek Dam on the biology of anadromous salmonids in the Rogue River. Rogue Basin Fisheries Evaluation Project, Oregon Department of Fish and Wildlife. U.S. Army Corps of Engineers contract DACW57-77-C-0027.
- Deeming, J.E. 1990. *Effects of Prescribed Fire on Wildfire Occurrence and Severity*. In Walstad, J., et al. (eds.), *Natural and Prescribed Fire in Pacific Northwest Forests: pp.95-110*. Oregon State University Press. Corvallis, OR.
- Donner, A. 2001. *Personal communication*. United States Army Corps of Engineers. Portland, OR.
- Economic Strategies Northwest. *Economic Effects Study Summary Report*. Lake Oswego, OR.
- Ehrlich, P.R., D.S. Dobkin, and D. Wheye. 1988. *The Birder's Handbook: A Field Guide to the Natural History of North American Birds*. Simon and Schuster Inc. New York, NY.
- Everest, F.H. and D.W. Chapman. 1972. *Habitat Selection and Spatial Interaction by Juvenile Chinook Salmon and Steelhead Trout in Two Idaho Streams*. Journal of the Fisheries Research Board of Canada 29:91-100.
- Everest, F.H. 1973. *Ecology and Management of Summer Steelhead in the Rogue River*. Fishery research report no. 7, Oregon State Game Commission, Corvallis, OR. Fisheries aid to fish restoration, project AFS 31, final report.
- Franklin, J.F. and C.T. Dyrness. 1988. *Natural Vegetation of Oregon and Washington*. Oregon State University Press. Corvallis, OR.
- Hall, J. 2002. *Personal communication, email*. Bureau of Land Management. Medford, OR.
- Hardy, C.C., et al. 2000. *Coarse-scale Spatial Data for Wildland Fire and Fuel Management*. <http://www.fs.fed.us/fire/fuelman>
- Hendee, J.C., G.H. Stankey, and R.C. Lucas. 1991. *Wilderness Management: Second Edition*. North American Press. Golden, CO.
- Hickman, J.G. 1993. *The Jepson Manual, Higher Plants of California*. University of California Press. Berkeley, CA.
- Holland, D. 1991a. *A Synopsis of the Ecology and Status of the Western Pond Turtle (Clemmys marmota) in 1991*. Prepared for the U.S. Fish and Wildlife Service, National Ecology Research Center San Simeon Field Station.
- Holland, D. 1991b. *Status and Reproductive Dynamics of a Population of Western Pond Turtles (Clemmys marmorata) in Klickitat County, Washington in 1991*. Report to Washington Department of Wildlife.

- Holland, D. 1991c. *Distribution and Current Status of the Western Pond Turtle (Clemmys marmorata) in Oregon*. Report to Oregon Department Fish and Wildlife.
- Horton, G. E. 1994. *Effects of Jet Boats on Salmonid Reproduction in Alaskan Streams*. Master thesis. Alaska
- Klein, J. 1992. *Recreation Opportunity Spectrum Inventory Background Paper for Revising the Hellgate Recreation Area Management Plan*. United States Department of Interior, Bureau of Land Management, Medford District Office, Grants Pass Resource Area. Medford, OR.
- Klein, J. 1993. *Recreation Opportunity Spectrum Inventory Background Paper for the Wild Section of the Rogue River*. United States Department of Interior, Bureau of Land Management, Medford District Office, Grants Pass Resource Area. Medford, OR.
- Klingeman, P.C., L.M. Cordes, and I. Nam. 1993. *Rogue River Erosion/Deposition Study*. Civil Engineering Department, Oregon State University. Corvallis, OR.
- Knight, R.L. and K.J. Gutzwiller. 1995. *Wildlife and Recreationists: Coexistence through Management and Research*. Island Press. Covelo, CA.
- MacLeod, J. 1992. *Personal communication*. Oregon Department of Fish and Wildlife. Central Point, OR.
- Matzke, A. 2002. *Personal communication*. Oregon Department of Environmental Quality. OR.
- McGarigal, K., R.G. Anthony, and F.B. Isaacs. 1991. *Interactions of Humans and Bald Eagles on the Columbia River Estuary*. Vol. 55, No. 2, Wildlife Monographs. The Journal of Wildlife Management. The Wildlife Society. Blacksburg, VA.
- Meyers, B. 2001. *Personal communication*. Oregon Department of Environmental Quality.
- National Marine Fisheries Service. 2002. *Listing Status: Fall Chinook*. <http://www.nmfs.noaa.gov/Isalmon/salmesa/chinswit.htm>.
- Nehlsen W., J.E. Williams, and J.A. Lichatowich. 1991. *Pacific Salmon at the Crossroads: Stocks at Risk from California, Oregon, Idaho, and Washington*. American Fisheries Society 16(2): 4-21.
- Nicholas, J.W. and D.G. Hankin. 1988. *Chinook Salmon Populations in Oregon Coastal River Basins: Description of Life Histories and Assessment of Recent Trends in Run Strengths*. Oregon Department of Fish and Wildlife. Information report number 88-1.
- Omi, P.N. and R.D. Laven. 1982. *Prescribed Fire Impacts on Recreation Wildlands: A Status Review and Assessment of Research Needs*. Bulletin 11. 18 p. Ensenhower Consortium for Western Environmental Forestry Research.
- Oregon Department of Environmental Quality. 1988. *Oregon Statewide Assessment of Nonpoint Sources of Water Pollution*. Portland, OR.
- Oregon Department of Environmental Quality. 1991. *Finding Solutions to Noise Problems*. Portland, OR.
- Oregon Department of Environmental Quality. 1998. *Final 1998 Oregon Section 303(d) List Decision Matrix*. Portland, OR.
- Oregon Department of Environmental Quality. 1993. *Air Quality Report*. Portland, OR.
- Oregon Department of Fish and Wildlife. 1990a. *Summary of Smolts and Presmolts Released from Cole Rivers Hatchery, 1973-1989*. Handout to summer steelhead task force.

Bibliography

- Oregon Department of Fish and Wildlife. 1990b. Rogue basin fisheries evaluation. *Effects of Lost Creek Dam on Winter Steelhead in the Rogue River*. Phase II completion report. Rogue basin fisheries evaluation project, Oregon Department of Fish and Wildlife. U.S. Army Corps of Engineers contract DACW57-77-C-0033.
- Oregon Department of Fish and Wildlife. 1991a. Rogue basin fisheries evaluation. *Effects of Lost Creek Dam on the Distribution and Time of Chinook Salmon Spawning in the Rogue River Upstream of Gold Ray Dam*. Rogue Basin Fisheries Evaluation Project, Oregon Department of Fish and Wildlife. U.S. Army Corps of Engineers contract DACW57-77-C-0033.
- Oregon Department of Fish and Wildlife. 1991b. Rogue Basin Fisheries Evaluation. *Effects of Lost Creek Dam on Coho Salmon in the Rogue River*. Phase II Completion Report. Rogue Basin Fisheries Evaluation Project, Oregon Department of Fish and Wildlife. U.S. Army Corps of Engineers contract DACW57-77-C-0033.
- Oregon Department of Fish and Wildlife. 1992a. Unpublished data. *Escapement of Anadromous Fish to the Rogue River: summer steelhead, 1976/77 through 1991/92; fall chinook, 1974-1986; spring chinook, 1942-1990*.
- Oregon Department of Fish and Wildlife. 1992b. Unpublished data. *Fall Chinook Carcass Counts, Lathrop Park to Robertson Bridge 1974-1991*.
- Oregon Department of Fish and Wildlife. 1992c. Unpublished data. *Smolt Releases from Cole M. Rivers Hatchery 1973-1989*.
- Oregon Department of Fish and Wildlife. 1992d. *Rogue Basin Fisheries Evaluation. Effects of Lost Creek Dam on Fall Chinook Salmon in the Rogue River*. Phase II Completion Report. Rogue Basin Fisheries Evaluation Project, Oregon Department of Fish and Wildlife. U.S. Army Corps of Engineers contract DACW57-77-C-0033.
- Oregon Department of Fish and Wildlife. 1992e. *Effects of Lost Creek Dam on Fall Chinook Salmon in the Rogue River*. Phase II Completion Report. Oregon Department of Fish and Wildlife, Fish Research Project DACW 57-77-C-0033, Completion Report. Portland, OR.
- Oregon Natural Heritage Program. 2001. *Rare, Threatened, and Endangered Plants and Animals of Oregon*. Oregon Natural Heritage Program. Portland, OR.
- Oregon State Game Commission. 1967. *Rogue River Basin Master Plan for Angler Access and Associated Recreation Uses*. Lands Section.
- Satterthwaite, T.D. 1987. *Effects of Lost Creek Dam on Spring Chinook Salmon in the Rogue River, Oregon: An Update*. Rogue Basin Fisheries Evaluation Project, Oregon Department of Fish and Wildlife. U.S. Army Corps of Engineers contract DACW57-77-C-0027.
- Satterthwaite, T.D. 1992. *Personal communication*. Oregon Department of Fish and Wildlife. Grants Pass, OR.
- Satterthwaite, T.D., B.P. McPherson, and M.W. Flesher. 1992. Rogue basin fisheries evaluation. *Effects of Elk Creek Dam on Fishery Resources in the Rogue River, Oregon: Completion Report for Preimpoundment Research*. Rogue basin fisheries evaluation project. Oregon Department of Fish and Wildlife in cooperation with the U.S. Army Corps of Engineers.
- Satterthwaite, T.D. 1995. *Effects of Boat Traffic on Juvenile Salmonids in the Rogue River*. Oregon Department of Fish and Wildlife. Portland, OR.
- Shelby, B., D. R. Whittaker, and E.E. Starkey. 1987. *Social and Ecological Impacts of Recreation Use on the Deschutes River Scenic Waterway*. Report to the State of Oregon Legislature.

- Shelby, B. and T.A. Heberlein. 1986. *Carrying Capacity in Recreation Settings*. Oregon State University Press. Corvallis, OR.
- Shindler, B. and B. Shelby. 1993. *Rogue River Study: Assessments of Recreation Impacts and User Perceptions on the Bureau of Land Management Recreation Section*. Department of Forest Resources, Oregon State University. Corvallis, OR.
- Steidl, R.J. and R.G. Anthony. 1996. *Responses of Bald Eagles to Human Activity During the Summer in Interior Alaska*. Oregon Cooperative Wildlife Research Unit. Department of Fisheries and Wildlife. Oregon State University. Corvallis, OR.
- Sutherland, A.J. and D.G. Ogle. 1975. *Effects of Jet Boats on Salmon Eggs*. New Zealand Journal of Marine and Freshwater Research 9:273-282.
- Tahoe Regional Planning Agency. 2001. *The Complete Guide to Boating Lake Tahoe - Boating Regulations*. <http://www.boattahoe.com/trparegs.htm>
- Tomasson, T. 1978. *Age and Growth of Cutthroat Trout, Salmo clarki clarki Richardson, in the Rogue River, Oregon*. M.S. Thesis. Oregon State University. Corvallis, OR.
- Transportation Research Board. 1994. *Highway Capacity Manual, Special Report 209, 3rd Edition*. National Research Council. Washington, D.C.
- United States Coast Guard. 1975. *Navigable Waters of the United States; Rogue River, Oregon, River Mile 0.0 to Mile 101.2*. Memorandum from Commandant to Commander, Thirteenth Coast Guard District. December 15, 1975.
- United States Congress. House. 1968a. Report No. 1623. *Providing for a National Scenic Rivers System and for Other Purposes*. 90th Congress. 2d Session.
- United States Congress. House. 1968b. Report No. 1917. *National Wild and Scenic Rivers System: Conference Report*. 90th Congress. 2d Session.
- United States Department of Agriculture, Natural Resource Conservation Service. 2001. *Waterborne Pathogens in Agricultural Watersheds*. Watershed Science Institute, University of Vermont. Burlington, VT.
- United States Department of Agriculture, Soil Conservation Service. 1983. *Soil Survey of Josephine County Oregon*.
- United States Department of Agriculture, U. S. Forest Service, Siskiyou National Forest. 1989. *Final Environmental Impact Statement-Land and Resource Management Plan*. USDA Forest Service, Pacific Northwest Region.
- United States Department of Agriculture, U.S. Forest Service, and United States Department of the Interior, Bureau of Land Management. 1999. Version 2.0. *Forest Service and Bureau of Land Management Protocol for Addressing Clean Water Act Section 303(d) Listed Waters*.
- United States Department of Agriculture, U.S. Forest Service, and United States Department of the Interior, Bureau of Land Management. 1994a. *Final Supplemental Environmental Impact Statement for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl*. Portland, OR.

Bibliography

- United States Department of Agriculture, U.S. Forest Service, and United States Department of the Interior, Bureau of Land Management. 1994b. *Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl. Standards and Guidelines for Management of Habitat for Late-Successional and Old-growth Forest Related Species Within the Range of the Northern Spotted Owl*. Portland, OR.
- United States Department of Agriculture, U.S. Forest Service, and United States Department of the Interior, Bureau of Land Management. 1996. *Rogue River/South Coast Biological Assessment*. Medford, OR.
- United States Department of Agriculture, U.S. Forest Service, and United States Department of the Interior, National Park Service. *Wild and Scenic Rivers Guidelines*. Federal Register Vol. 47, No. 173. September 7, 1982.
- United States Department of Commerce, Bureau of Economic Analysis. 2001a. *Regional Economic Information System 1969-1999*. <http://www.bea.doc.gov/bea/regiona/reis/>
- United States Department of Commerce, Bureau of Economic Analysis. 2001b. *Local Area Personal Income: Table CA05*. <http://www.bea.doc.gov/bea/regiona/reis/>
- United States Department of Commerce, Bureau of Economic Analysis. 2001c. *Total Full-time and Part-time Employment by Industry: Table CA25*. <http://www.bea.doc.gov/bea/regiona/reis/>
- United States Department of the Interior, Bureau of Land Management. 1972. *Rogue National Wild and Scenic River, Oregon: Notice of Revised Development and Management Plan*. Federal Register, Vol. 37, No. 131 - Friday, July 7, 1972, pp. 13,408-13,416. Washington, D.C.
- United States Department of the Interior, Bureau of Land Management, Medford District Office. 1978. *Rogue National Wild and Scenic River Activity Plan, Hellgate Recreation Section*. Medford, OR.
- United States Department of the Interior, Bureau of Land Management, Medford District Office. 1979. *Josephine Sustained Yield Management Framework Plan*. Medford, OR.
- United States Department of the Interior, Bureau of Land Management, Medford District Office. 1980. *Rogue National Wild and Scenic River Wildlife Management Plan, Hellgate Recreational Section*. Medford, OR.
- United States Department of the Interior, Bureau of Land Management, Medford District Office. 1992a. *Calculations Using Oregon Department of Fish and Wildlife Fall Chinook Carcass Count Data for the Rogue River from Lathrop Park to Robertson Bridge, 1974-1991*.
- United States Department of the Interior, Bureau of Land Management, Medford District Office. 1992b. *Draft Medford District Resource Management Plan and Environmental Impact Statement*. Medford, OR.
- United States Department of the Interior, Bureau of Land Management, Medford District Office, Grants Pass Resource Area. 1992c. *Rogue River's Outstandingly Remarkable Values (ORVs)*. Memorandum from Outdoor Recreation Planner, Medford District Office, October 29, 1992. 8351.2(11785). Medford, OR.
- United States Department of the Interior, Bureau of Land Management, Medford District Office. 1994. *Final Medford District Resource Management Plan and Environmental Impact Statement*. Medford, OR.
- United States Department of the Interior, Bureau of Land Management, Medford District Office. 1995. *Record of Decision and Resource Management Plan and Environmental Impact Statement*. Medford, OR.
- United States Department of the Interior, Bureau of Land Management, Medford District Office. 2001. *Documentation of Land Use Plan Conformance and NEPA Adequacy (DNA)*. Worksheet. Medford, OR.

- United States Department of the Interior, Bureau of Land Management, Medford District Office, Grants Pass Resource Area. 1991. *Preplan Analysis for Revising the Recreation Area Management Plan: Rogue River Recreation Section*. Medford, OR.
- United States Department of the Interior, Bureau of Land Management, Medford District Office, Grants Pass Resource Area. 1993. *Preparation Plan for Revising the Hellgate Recreation Area Management Plan*. Medford, OR.
- United States Department of the Interior, Bureau of Land Management, Medford District Office, Grants Pass Resource Area. 1994. *Issues and Alternatives for Management of the Hellgate Recreation Area of the Rogue River*. Medford, OR.
- United States Department of the Interior, Bureau of Land Management, Medford District Office, Grants Pass Resource Area. 1997. *Commercial Outfitter Operating Plan for the Hellgate Recreation Section*. Medford, OR.
- United States Department of the Interior, Bureau of Land Management, Medford District Office, Grants Pass Resource Area. 1999. *Environmental Assessment for the Grants Pass Active Club Amendment of Special Use Recreation Permit MRP-251 to Include a Jet Boat River Race Classes A Through C and Unlimited*. Medford, OR.
- United States Department of the Interior, Bureau of Land Management, Oregon State Office. 1989. *Information Bulletin No. OR-90-73. Management Guidelines and Standards for National Wild and Scenic Rivers—Oregon/Washington*. Portland, OR.
- United States Department of the Interior, Bureau of Land Management, Oregon State Office. 2000. *Information Bulletin No. OR-2000-092. Oregon and Washington Bureau of Land Management Special Status Species List - January 2000*. Portland, OR.
- United States Fish and Wildlife Service. 1986. *Recovery Plan for the Pacific Bald Eagle*. U.S. Fish and Wildlife Service. Portland, OR.
- United States Fish and Wildlife Service. 2002. *FWS ref. #1-15-03-F-112*. Roseburg, OR.
- United States Geological Survey. 1990a. *Water Resources Data of Oregon, Water Year 1990*. Portland, OR.
- United States Geological Survey. 1990b. *Monthly and Annual Streamflow and Flow-Duration Values*. Portland, OR.
- Walker, M. 1993. *Agency Responsibility Background Paper for Revising the Hellgate Recreation Management Plan*. Bureau of Land Management, Medford District Office, Grants Pass Resource Area. Medford, OR.
- Walker, M. and L.A. Austermuehle. 1994. *Motorized Tour Boat History Background Paper for Revising the Hellgate Recreation Management Plan*. Bureau of Land Management, Medford District Office, Grants Pass Resource Area. Medford, OR.
- Walker, M. and P. Littlefield. 1993. *Scoping Document for Revising the Hellgate Recreation Area Management Plan*. Bureau of Land Management, Medford District Office, Grants Pass Resource Area. Medford, OR.
- Walker, M. and P. Littlefield. 1994. *Sound Inventory Background Paper for Revising the Hellgate Recreation Area Management Plan*. Bureau of Land Management, Medford District Office, Grants Pass Resource Area. Medford, OR.
- Waples, R.S. 1991. *Definition of "Species" under the Endangered Species Act: Application to Pacific Salmon*. National Oceanic and Atmospheric Administration Technical Memorandum NMFS F/NWC-194. 29 pp.

Bibliography

- Water Resources Consulting (WRC). 1995. *Rogue River Boating Safety and Conflicts Study*. Sacramento, CA.
- Whitman, B. 1993. *Botanical Resources Background Paper for Revising the Hellgate Recreation Area Management Plan*. Medford, OR.
- Wineburg, H. 1997. *Population Estimates for Oregon: July 1, 1996*. Center for Population Research and Census. 26pp. College of Urban and Public Affairs, Portland State University. Portland, OR.
- York, R., P. Rowland, and K. Salley. 1994. *A Survey of the Attitude of Residents Along the Hellgate Recreation Area of the Rogue River Toward User Groups and Their Impact*. Department of Psychology, Southern Oregon State College. Ashland, OR.

Appendices

Federal Register 1972

Appendices

Appendix A: The Role of the Federal Reserve in the U.S. Economy
The Federal Reserve is the central bank of the United States. It is responsible for conducting the nation's monetary policy, regulating the banking system, and providing financial services to the government and the public.

Appendix B: The Role of the Federal Reserve in the U.S. Economy
The Federal Reserve is the central bank of the United States. It is responsible for conducting the nation's monetary policy, regulating the banking system, and providing financial services to the government and the public.

Appendix C: The Role of the Federal Reserve in the U.S. Economy
The Federal Reserve is the central bank of the United States. It is responsible for conducting the nation's monetary policy, regulating the banking system, and providing financial services to the government and the public.

Appendix A

Federal Register 1972

DEPARTMENT OF
THE INTERIOR
Bureau of Land Management
ROGUE NATIONAL
WILD AND SCENIC
RIVER, OREGON
Notice of revised designations and
management plans

federal register

FRIDAY, JULY 7, 1972
WASHINGTON, D.C.

Volume 37 ■ Number 131

PART II



DEPARTMENT OF THE INTERIOR

Bureau of Land Management

ROGUE NATIONAL WILD AND SCENIC RIVER, OREGON

**Notice of revised development and
management plans**

DEPARTMENT OF THE INTERIOR

Bureau of Land Management ROGUE NATIONAL WILD AND SCENIC RIVER, OREG.

Notice of Revised Development and Management Plans

The following is a proposed combined plan for development, operation and management of the Rogue National Wild and Scenic River administered by the Bureau of Land Management (BLM) and the U.S. Forest Service (FS) in accordance with Public Law 90-542. That portion of the Rogue River under the administration of the Bureau of Land Management extends from the mouth of the Applegate River downstream approximately 47 miles to the Siskiyou National Forest boundary near Marial. The Forest Service has administrative responsibilities for that portion of the Rogue River from the Siskiyou National Forest boundary downstream approximately 37 miles to the Lobster Creek Bridge.

This single plan revises and combines the BLM and the FS Master Plans for the Rogue River component of the National Wild and Scenic Rivers system published in the *FEDERAL REGISTER* October 24 and October 7, 1969, and as "House Document No. 91-175" and "House Document No. 91-170" respectively.

Although the original BLM and FS Master Plans were closely coordinated, there was some difference in language which caused public confusion. Therefore, the BLM and FS cooperatively developed this combined Rogue River Plan. This plan will guide both agencies in their development and management of the Rogue Wild and Scenic River.

The boundaries of the Rogue Wild and Scenic River and areas of responsibility for BLM and FS remain unaltered. Appendices and supplemental information remain unchanged. The only substantial revision pertains to expansion of existing lodges on the stretch of river classified as Wild River. Under the original BLM Master Plan, lodge expansion was permitted provided approval of construction and site plans was obtained from BLM. The original FS Plan did not allow expansion of lodges. The new combined plan prohibits lodge expansion.

The plan is available for public review and comment at the following BLM and FS offices:

Bureau of Land Management, Division of Recreation, Interior Building, Washington, D.C. 20240.

Forest Service, Division of Recreation, Agriculture Building, Washington, D.C. 20250.

Bureau of Land Management, Oregon State Office, 729 Northeast Oregon Street, Portland, OR 97208.

Forest Service, Pacific Northwest Region, 319 Southwest Pine Street, Portland, OR 97208.

Bureau of Land Management, Medford District Office, Federal Building—U.S. Courthouse, Medford, Oregon 97501.

Forest Service, Forest Supervisor's Office, Siskiyou National Forest, Grants Pass, Oregon 97526.

The plan shall take effect 90 days from the date of publication of this notice.

Sincerely yours,

BURTON W. SILCOCK,
Director,
Bureau of Land Management.

EDWARD P. CLIFF,
Chief, U.S. Forest Service.

JUNE 28, 1972.

ROGUE RIVER PLAN

A COMPONENT OF THE NATIONAL WILD AND SCENIC RIVERS SYSTEM

Introduction	1
River Boundaries and Ownership	2
River Classification and Description:	
Entire River	3
Wild	4
Scenic	5
Recreational	5
Coordination with Other Agencies	9
Background Information:	
Physiography:	
General	11
Vegetation	12
Fish and Wildlife	12
Climate	13
River Flow	13
Water Quality	14
Cultural Factors:	
History	14
Transportation and Access	15
Population	15
Economy	16
River Uses:	
Boating	16
Fishing	17
Camping	17
Management Objectives	17
Management Direction	18
Soil and Watershed	19
Fish and Wildlife	20
Minerals	20
Protection	21
Recreation	21
Acquisition	24
Timber	25
Improvements	26
Transportation	29
Utilities	31
Visitor Information	32
Grazing	32
Bordering Lands	33
Appendix	
Recreation Development—Table 2	
Land Ownership and River Mileage—Table 2	
Maps	
Legal Description	
Wild and Scenic Rivers Act	

INTRODUCTION

Public Law 90-542, October 2, 1968, the "Wild and Scenic Rivers Act" hereinafter referred to as "The Act", designates certain selected rivers of the Nation possessing outstanding scenic recreational, natural, and other similar values and characteristics to be preserved and protected for the benefit and enjoyment of present and future generations.

The portion of the Rogue River designated as a component of the National Wild and Scenic Rivers System extends from the mouth of the Applegate River (about 6 miles downstream from Grants Pass) downstream to the Lobster Creek Bridge (about 11 miles upstream from its mouth), a total distance of 84 miles.

The river is to be administered by agencies of the Departments of the Interior and Agriculture as agreed upon by the Secretaries of

both Departments. The portion of the river from the mouth of the Applegate downstream to Marial, a distance of approximately 47 miles, will be administered by the Bureau of Land Management (BLM). The lower 37 miles are located within the boundaries of the Siskiyou National Forest and will be administered by the Forest Service of the U.S. Department of Agriculture (USFS). The term "The Agencies," as used hereafter, refers to the USFS and BLM, or to either one when used singularly.

Classification of this portion of river into the three classes presented in the Act has been proposed together with supporting management objectives and directives.

The Act charges that "Each component of the National Wild and Scenic Rivers System will be administered in such manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration, primary emphasis shall be given to protecting its aesthetic, scenic, historic, archeologic, and scientific features. . . ."

Each agency charged with the administration of an initial component of the National Wild and Scenic Rivers System must, within 1 year of the date of the Act, establish detailed boundaries, classify the river or its various segments as wild, scenic, or recreational in nature, and prepare a river plan in accordance with the classification.

Development of a rationale for protecting and preserving the outstanding scenic, recreational, historic, cultural, and other values of the designated rivers and their immediate environments for the benefit of present and future generations is implicit within the Act. It is the objective of this river plan to present such a rationale.

Separate but coordinated river plans for the management of the Rogue River were prepared by the Forest Service and the Bureau of Land Management in September and October, 1969. In the development of these plans, public participation was obtained through an ad hoc steering committee, public meetings, and consultation with individuals and groups. Subsequent to the acceptance and publishing of the two river plans in the *FEDERAL REGISTER*, October 24, 1969, the decision was made by the agencies that the plans should be combined into one. Uniformity of administration and management could more easily be demonstrated if both agencies referred to one plan.

Emphasis is on the development of sound management objectives for the river and adjacent lands together with the necessary directions for reaching these objectives. In this sense, then, the river plan can be considered policy which establishes the framework to guide detailed implementation plans for recreation, wildlife, and fisheries habitat, timber management, etc. These detailed plans will be prepared with the respective resource staff specialists of the agencies as a part of the regular planning procedures. The implementation plans will be coordinated with those of the state and local agencies. The assistance and cooperation of private landowners will be encouraged.

Information concerning the river and detailed plans may be obtained by writing or visiting the BLM Oregon State Office in Portland, the Medford District Office, the USFS Region 6 Office in Portland, or the Siskiyou National Forest Office in Grants Pass.

RIVER BOUNDARIES AND OWNERSHIP

RIVER BOUNDARIES

Several factors influenced the location of the river boundaries. The Act limits the

area within the boundaries to not more than an average of 320 acres per mile. With a length of 84 river miles to be included within the boundaries, a maximum area of 26,880 acres is possible.

Of primary importance was the nature and condition of the land area seen from the river or river bank. Protection of this primary view area is one of the principal management objectives.

Boundaries are on legal subdivision and property lines where possible. On the basis of the above consideration, the river boundaries contained a total of 25,999 acres—an average of 310 acres per river mile.

OWNERSHIP

Refer to the Appendix for the legal description of lands within the boundary.

RIVER CLASSIFICATION AND DESCRIPTION

ENTIRE RIVER

Classification. The Act provides three classifications which may be applied to a river or portion thereof which has been selected for inclusion in the National Wild and Scenic Rivers System. These are wild, scenic and recreational. A particular river may have one, two, or all three classes.

The Rogue River has five distinct areas. Three have been classified as recreational, one as scenic, and one as a wild river area.

Description. From its source in the high Cascade Mountains in southwestern Oregon near Crater Lake National Park, the Rogue, the third largest river in Oregon, tumbles and flows over 200 miles entering the Pacific Ocean.

The Rogue River Basin contains approximately 5,060 square miles of which 97 percent is in Oregon and 3 percent in California. Included within the basin is nearly all of Jackson and Josephine Counties, a large part of Curry County, lesser portions of Klamath and Douglas Counties, and a very small portion of Coos County, all in Oregon. It also includes very small segments of Siskiyou and Del Norte Counties in northwest California.

The River descends from the Applegate River to Lobster Creek in a series of steps. There is a difference of elevation of 834 feet in these 84 miles. Below Grave Creek, large rapids, submerged boulders, and shallow water tax the most skilled boatman. Rainie Falls, with a vertical drop of some 10 feet, is the only spot where it is necessary to portage or rope boats around the rapids. The steepest portion is in Howard Creek Chute and Mule Creek Canyon, with an average gradient of about 25 feet per mile. Below Agness to Lobster Creek the average gradient further flattens to about 5 feet per mile.

RIVER CLASSIFICATION AND DESCRIPTION

WILD

Class definition. A wild river area is free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and water unpolluted. It represents a vestige of primitive America.

Wild river areas may include an occasional inconspicuous road, airstrip, habitation, or other kind of improvement already established, provided the effects are limited to the immediate vicinity.

Description. The river classified as a wild river area extends from Grave Creek to Watson Creek, a distance of 33 miles.

This section of river flows through a natural-like environment with many areas of outstanding natural beauty. In Mule Creek Canyon, the river winds its way through a very tight channel bounded on both sides

by vertical rock faces rising 40–50 feet above the water. The water appears unsure of its course as it churns through the canyon which is less than 20 feet wide in places. An eerie, isolated feeling grips the traveler because the noise of the rushing water blots out all other sounds. The canyon walls in this area are so sheer that they can be seen unbroken from the water's edge to the ridge-top, a distance of 2,000 vertical feet at one point. Blossom Bar rapids and the Devil's Stairs rapids provide "picture-taking" scenery of white water conditions. Clay Hill still-water, above Flea Creek, is a welcome change of pace after leaving the exciting white water conditions of the narrow canyon. This area is more open with a mixture of boulders covered with light-green colored moss, grass covered slopes, small caves, and live oak trees.

Roads following the river above the mouth of Grave Creek leave the river at that point. Except for four primitive jeep roads and an unimproved road leading into Marial from the north, there is no vehicular access from Grave Creek to Watson Creek segment of the river. The wild river area is not without some man-made improvements. There is a small settlement at Marial. The Marial road extends to within several hundred feet of the high-water line, but is not visible from the river.

There is also a Forest Service station that houses a trail crew and a fire prevention guard. The Forest Service station is not visible from the river.

SCENIC

Class definition. A scenic river area is free of impoundments, with shoreline or watershed still largely primitive, and shoreline largely undeveloped but accessible in places by roads. Long stretches of conspicuous or well-traveled roads may not parallel the river in close proximity.

Description. One section of the river has been classified as a scenic river area. It extends from the creek in sec. 36, T. 35, S., R. 13, W., upstream to Blue Jay Creek in sec. 11, T. 35, S., R. 12, W., a distance of 7½ miles.

The river in this area is wider and quieter than is the wild river area. There are some small riffles, but generally the water is calm. Large gravel bars are present in much of the area. The adjacent land generally slopes away from the river at an angle that is not too steep. An exception to this is in Copper Canyon where the river narrows and the canyon walls rising abruptly from the river can be seen unbroken for about 800 vertical feet. Vegetation in the scenic river area is generally dense and extends essentially unbroken to the high water mark.

Only five structures can be seen from the river. In one place a power line crosses the river, but it is almost unnoticeable. There is road access to the river's edge in two locations: one is on private land and is not now used by the public; the other, at Tom East Creek, is so rough that it is even difficult for four-wheel-drive vehicle use. While there are a number of intrusions by man in this section, the shoreline is largely undeveloped; the river still offers high-quality natural scenery, and the character of the area remains essentially primitive.

RECREATIONAL

Class definition. A section of river which is readily accessible by road or railroad and may have some development along the shoreline. The river may have undergone some impoundments or diversions in the past.

It also possesses high potential for recreation development sites near the river as well as sites for launching and mooring boats.

Description. There are three separate sec-

tions of the river which have been classified as recreational river areas. They are (a) Hellgate, (b) Agness, and (c) Skookumhouse:

(a) Hellgate—

Hellgate Recreational River Area extends from the mouth of the Applegate River downstream 26.4 river miles to Grave Creek Bridge. It exhibits two distinctly different characters, with Hellgate Canyon as the division point.

In the upper portion, the river traverses a wide alluvial valley upon which may be seen evidence of previous meander courses. Primarily agricultural in nature, this section has a long history of farming and grazing.

A number of subdivisions occupy the river bank and overlooking hills. Proximity to the city of Grants Pass, coupled with the attraction of the river, has made residential use an ever increasing land use in this portion.

Below Hellgate, the river becomes confined in a canyon no longer subject to periodic changes in course. The few alluvial flats and bars have long been used and occupied. Some of these are undergoing subdivision to homesites or vacation retreats. Access is easy and convenient via a modern rural highway along the southwest shore.

There is a gradual downstream transition from a rural residential-agricultural character to a preview of the adjoining wild river area.

Intermittent stands of timber are seen along the shoreline and on the bluffs overlooking the upper river area.

The river becomes more entrenched with a corresponding increase in the amount of adjacent timber on nonagricultural land.

Within the Hellgate Recreation River Area man has exerted his influence on the land in many ways. Agriculture and mining have been practiced for over a century. Timber harvest and gravel removal have been undertaken in more recent times.

Recreational use centers on water-oriented activities, including fishing, boating, and swimming. Sightseeing, rockhounding, and camping are also popular.

At present, all facilities and developments for public recreational use are provided by Josephine County. There are 11 facilities in the area, ranging from simple boat ramps to a full complex at Indian Mary Park that includes sewer and water hookups for trailers.

Much of the land in this area is in private ownership.

(b) Agness—

The Agness Recreational River Area extends from the mouth of Watson Creek downstream to the mouth of Blue Jay Creek, a distance of about 10 miles. It connects with the Wild River Area on the upper end and the Scenic River Area on the downstream end.

The general character of this area is open canyon with sides neither very steep nor high. There are several places where the banks rise sharply and then level off to create a large flat bench. Most of these locations have been converted to pasture. Although there are still some places where the old-growth timber has not been harvested, most of it has been removed. The existing vegetative pattern is a combination of old-growth Douglas-fir, young second-growth Douglas-fir, hardwoods and grassy fields.

Conspicuous roads parallel the river closely through most of this area. Many of the cut and fill slopes have not yet revegetated and in some cases the fills extend down into the river. Two large concrete bridges, one across the Rogue River and one across the Illinois River, are visible from a large portion of this section.

Other man-made developments are readily evident in this area. They include utility lines that both parallel and cross the river, private homes, farms, trailer houses, and commercial structures. The small community of Agness is located in this area. While evidence of past mining activity can be found, there is none taking place now.

Occupancy uses include recreation residences, resorts in Agness and Illahe and a 45-unit campground near Illahe.

(c) Skookumhouse—

The Skookumhouse Recreational River Area extends from the Lobster Creek Bridge upstream to the creek in sec. 36, T. 35 S., R. 13, W. where it connects with the Scenic River Area. This is a distance of about 7 miles.

The general character of this river area is similar to the Agness Recreational River Area; that is, a canyon which allows the river to meander. The riverbed is quite broad here with gravel bars alternating from one side of the river to the other for its entire length. Although there are several flats along the river, there are only a few places where pasture has been developed. The banks are heavily forested with large old-growth Douglas-fir trees.

The Agness Road is conspicuous on the south side of the river for much of the length of this area. Many of the construction scars have still not revegetated and in some places the fill extends down into the river.

There are a small number of homes visible from the river and utility lines cross the river in a few places. Except for the Agness Road, man's impact is not heavily felt in this area.

Motorboating is popular because this section of river is easy to navigate. Almost all the boating originates outside of the area, however, because there are few suitable places to launch boats along this section of river. Commercial passenger jet boats pass through this area on their way upstream. It is necessary to deepen a channel through some of the gravel bars annually to permit passage of the large commercial boats. This is all done in gravel areas, so no permanent alteration to the riverbed occurs.

COORDINATION WITH OTHER AGENCIES

The following sections outline some of the administrative responsibilities of the State, other Federal and local governments.

STATE OF OREGON

The Oregon State Scenic Waterways Act, effective December 3, 1970, declared that portion of the Rogue River described in this master plan as a Scenic Waterway. Since the Rogue was an initial component of the National Wild and Scenic River and a State Scenic Waterway, the administering agencies will cooperate with the State Highway Commission, the State Engineer and the other State agencies concerned with the administration of the river area.

Legislative limitation has been placed on the construction of dams or structures on the Rogue River which would interfere with the free passage of fish. (O.R.S. 542.210)

Other legislation dealing with the Rogue River includes O.R.S. 536.300 which establishes a minimum flow of 735 c.f.s. at the mouth of the river. This was enacted for the express purpose of maintaining a minimum perennial stream flow to support aquatic life and minimize pollution.

To further protect the fisheries of the river, the State Legislature had previously established the Rogue River Coordination Board to provide a means for coordinating placer mining and fishing interests for the mutual benefit of both. The Board is composed of a fishing representative, a mining representative, and a neutral party.

Maintenance of water quality and implementation of water quality standards on the Rogue River is under the jurisdiction of the Oregon Department of Environmental Quality. Water quality and waste treatment standards for the river were adopted by that Department on July 24, 1969, and should be instrumental in restoring the river to an unpolluted condition.

The Oregon State Game Commission manages the fish and wildlife resources of the State. The Commission has developed a Master Plan for Angler Access and Associated Recreational Uses for the Rogue River Basin. Completed in 1967, it lists suggestions for future boat launching facilities, river access sites, and campgrounds. Twenty-three such sites are listed between Lobster Creek on the Lower Rogue and the mouth of the Applegate River on the Upper Rogue. Fifteen of these are in the part of the Rogue administered by the Bureau of Land Management. Several coincide with sites proposed for development by the Agencies and listed in the Appendix.

Jurisdiction for boating and boat use rests with the State Marine Board and Game Commission. Recent action includes designation of the upper 2½ miles of the Hellgate Recreational River area as a testing site for motorboats.

The State Board of Forestry administers State lands suitable for timber production. This includes two parcels within the River boundary.

CORPS OF ENGINEERS

The U.S. Army Corps of Engineers has investigated 36 reservoir sites in the Rogue River Basin. Of these, Lost Creek, Elk Creek, and Applegate were determined feasible and economically justified.

The Lost Creek site received construction authorization from the Flood Control Act of 1962 (87th Congress). It is located on the Rogue at river mile 158 (outside the river boundary) and has a planned capacity of 465,000 acre-feet.

Elk Creek and Applegate sites are on tributary streams of the Rogue River. Both sites were authorized for construction at the same time as Lost Creek and planning is well underway. Designed storage capacity would be 101,000 acre-feet and 72,000 acre-feet, respectively.

The three part program of the Corps of Engineers planned and justified a portion of the storage capacity on the basis of fishery protection and pollution abatement. Controlled release, from multilevel outlets, would assure minimum flows of 1,200 c.f.s. at Grants Pass. Gauging stations near Medford and Gold Beach would determine release requirements.

BUREAU OF RECLAMATION

Reclamation projects authorized in the basin include the Rogue River Basin Project-Talent Division and Agate Dam and Reservoir. The Talent Division has been constructed. Proposed projects include the Merlin Division authorized for construction by Public Law 91-270 and Illinois Valley Division.

The Bureau of Reclamation would also operate the irrigation features of the Corps of Engineers' Elk, Lost, and Applegate Reservoirs. Construction of these projects would irrigate most of the economically irrigable lands in the basin.

COUNTIES

The Board of County Commissioners and County Planning Commissions in Curry and Josephine Counties have made continuing contributions to development of this river plan.

The largest part of the BLM-administered section of the river lies within Josephine County, with a small stretch at the lower end within Curry County. All of the USFS portion of the river is in Curry County.

In April, 1971, the Josephine County Planning Commission adopted a comprehensive plan for Josephine County. The plan, required by law, is a blueprint for a zoning ordinance which is now in final form. Included within the ordinance is a Wild River Zone which follows closely the Oregon State Scenic Waterways boundary.

The Josephine County Parks Department has developed and operates a group of park facilities in the upper portion of the study area. Their 1967 Park and Recreation Plan outlines proposed additions to these facilities. Proposals for development of the Hellgate Recreational River Area contained in this plan are those portrayed in Josephine County's plan.

BACKGROUND INFORMATION

PHYSIOGRAPHY

General. The Rogue River is one of three which originate in the Interior Cascade Range and flows westerly to the ocean. In places, the river churns through solid rock gorges with near-vertical walls. Flat or gentle topography is very limited. Small benches occur occasionally, but often there is a steep, high bank that separates them from the river. Much of the easily accessible land with gentle topography is in the form of river-level bars or islands and, in some parts of the river, even these are scarce and are subject to high water almost annually.

As it crosses the central portion of the basin, the Rogue River is a placid stream meandering through agricultural and rural residential developments. In this stretch, the observable landscape extends for several miles on each side of the river. Gravel bars and islands occur here and there.

Below Robertson Bridge, some 15 miles downstream from Grants Pass, the water-front lands take on a canyon-like characteristic.

Natural features, including towering cliffs and large moss covered boulders, in some of the canyons and chutes are spellbinding. Outstanding in an area where each succeeding vista is noteworthy are sights in Hellgate Canyon, Howard Creek Chute, Kelsey Canyon, and Mule Creek Canyon. In the latter two areas, the river winds its way through narrow canyons which rise abruptly from the water.

Vegetation. Concentrated along the river-front and adjacent slopes is perhaps the greatest cross section of the plant kingdom to be found on the Pacific coast. This region is the northern limit of the range of many species common to California and the southern limit of many northern species. Douglas-fir is the predominate conifer species, associated with ponderosa pine, sugar pine, white fir and incense cedar. Western red cedar, Port Orford cedar and Pacific yew, noble fir and Shasta red fir also occur. Botanical rarities such as Brewer spruce and Lawson cypress are found in widely scattered, isolated locations.

Important hardwoods include Oregon white oak, California black oak, Pacific madrone, Oregon ash, black cottonwood, red alder, golden chinquapin, tanoak, Oregon myrtle and big leaf maple.

Understory shrubs include rhododendron, azalea, blue blossom, salal, dogwood, vine maple, Oregon grape, various ferns, huckleberry, and salmon berry. Chaparral, including manzanita, ceonothus, poison oak, and canyon live oak and various grasses occurs on the hot, drier sites.

Vegetation along the river's edge ranges from moss, lichen, and grasses to wild flowers, shrubs, and trees.

Fish and Wildlife. Wildlife resources contribute greatly to the recreational values of the Rogue River. In addition to their harvest value, these animals are easily viewed in their natural habitat and have substantial aesthetic value.

The Rogue River Basin provides habitat for several large herds of black-tailed deer. These animals are commonly seen along the river. Deer harvest in the Rogue Basin averages 10,000 per year in approximately 100,000 hunter days use. Elk are seen occasionally along the river banks.

Large numbers of black bear live along the river and are occasionally seen during certain seasons. Bears are now protected from hunting in the area between Grave Creek and Lobster Creek.

It has been stated that the Rogue River is an anadromous fish highway. There is no time during the year when there are not mature fish in the river making their way upstream to spawn, or young fish working their way to the ocean to grow and mature. Anadromous fish include two races of steelhead, sea-run cutthroat, trout, chinook and coho salmon, two species of sturgeon and shad. Resident fish include four species of trout and six species of warm-water game fish.

Small animal species natural to the area include fur bearers and grey squirrels. Upland game species which may be observed along the river include Chinese pheasants, California and mountain quail, blue and ruffed grouse, band-tailed pigeons, and mourning doves. Hunting of these species within the river boundary is light.

Large numbers of American mergansers and lesser numbers of mallards and wood ducks nest along the river. Because the Rogue is not on a major migratory flyway, wintering use and harvest is light. Other bird species which inhabit the area are Kingfisher, Water Ouzel, the Great Blue Heron and numerous song-bird species.

Two birds listed as rare or endangered by the BSAW in the publication *Endangered Plants and Animals of Oregon* Special Report No. 278, found along the Rogue are the osprey and the bald eagle. The rugged canyons of the lower Rogue provide the isolated nesting sites these species need.

Climate. The climate along the river is diversified. Near the coast, cool and humid weather prevails throughout the year. Farther upstream, the effects of the fog belt climate are less pronounced and the weather is often hot and dry during the summer. The average precipitation increases from about 90 inches at the mouth of the Rogue River to over 100 inches annually at Marial. About 80 percent of this precipitation occurs between October 15 and May 15.

Within the western section of the Rogue River Basin, average temperatures range from 32° to 75° Fahrenheit in the mountains and 40° to 67° along the coast. The range is broader within the central valley section where temperature averages range from winter lows of 32° to summer highs of 92° in the valleys, and 32° to 75° in the mountains.

River Flow. The Rogue River has an average annual discharge into the Pacific Ocean of 5,561,000 acre-feet.

Stream flow patterns are typified by moderate to heavy runoff in late winter and early spring with low flows during the summer and fall. Many of the small tributary streams become completely dry during the latter period.

Stream flow records have been maintained at Gold Ray Dam near Medford since 1905. Over that period, the average annual runoff has been 2,113,000 acre-feet. Maximum and

minimum annual runoffs have been 3,570,000 and 839,000 acre-feet, respectively.

Flooding has always been a problem within the Rogue River Basin. Observable channel change has been extensive over portions of the central valley section. Below Hellgate Canyon, channel change is minimal due to the gorge which confines the stream. Narrow benches and occupied flats are generally inundated by each flood.

The largest flood of historical record occurred in 1861 and the second largest in 1890. The most recent large flood occurred in 1964.

Water Quality. Man has affected the quality of the Rogue River water. Analysis of river water near Grants Pass indicates that at certain periods during minimum flow, the bacteria count exceeds by as much as three times the allowable maximum for domestic consumption. Reports indicate a detergent foam problem in some isolated stretches of the river during late summer. Flushing effects by controlled release from proposed upstream impoundments during these times would be of benefit.

The recent adoption of Water Quality and Waste Treatment Standards for the Rogue River Basin by the Oregon Department of Environmental Quality will be beneficial to recreational use of the river. The new sewage treatment plants for the Medford and Grants Pass areas are scheduled for completion in 1971 and 1972, respectively. Both plants are designed to meet or exceed DEQ standards. When they are in operation, the water quality of the entire Wild and Scenic River should be within acceptable limits.

CULTURAL FACTORS

History. The Rogue River region has an exciting history. Explorations, fur trapping, settlement by immigrants, a gold rush, Indian wars, irrigation and lumbering have all helped shape the area into what it is today. Most of these activities have taken place within the past 125 years. Gold was discovered on the Rogue in 1849; and in the ensuing years every area along the river with gold in sufficient concentrations was mined. Most of the mining scars have now healed. Although mining activity on the river is at a standstill, the trails which the miners built provided access to the area and speeded its development. In 1931, Zane Gray patented a mining claim at Winkle Bar. One of his cabins still remains as a memento of his world, and the glory of the past.

Transportation and access. Access to the region is available by automobile, train, bus and air. Interstate Highway 5 parallels the river from the city of Gold Hill to Grants Pass. The Redwood Highway, U.S. 199, provides the major link between Grants Pass and the coastal areas. Highway 101, paralleling the Pacific Ocean, crosses the river at Gold Beach.

Access to the river within the boundaries of the Wild and Scenic River is via road systems which were constructed primarily to haul timber from the nearby forests. A low-standard, dead-end road reaches the river at Marial. A direct route between Grants Pass and Gold Beach has recently been constructed which parallels the river from Gold Beach to Agness and Hellgate to Galice. County roads parallel most of the Hellgate Recreational section. There is also a road reaching the river upstream from Agness through Powers from the north. The Wild section of the river from above Illahe to Grave Creek is roadless with the exception of the Marial Road. This roadless section is served by a foot trail.

The Bureau of Land Management maintains 24 miles of foot trail from Grave Creek to Marial. Closed to motorized vehicles, horses, and pack animals, this trail is well constructed, safe and has moderate grades

making hiking comparatively easy for all age groups.

The Forest Service maintains the Rogue River trail from Marial to Illahe. Between Illahe and the mouth of the river, hikers may follow roads and a section of the old trail not presently maintained. Thus, there exists a 68-mile reach of the river where it is possible to hike in conditions ranging from intensively developed to relatively primitive.

Drift boats have access to the entire area throughout the year, but motorized boats cannot go all the way upstream during periods of low flow.

Population. Population centers within the basin include Ashland, Medford, and Grants Pass, Oreg. Gold Beach is at the mouth of the river.

Although data on where users come from is sketchy, surveys indicate that more than half of the recreationists visiting the river come from out of State.

As might be expected, California contributes the majority of out-of-State visitors. With the direct high-speed highways and freeways linking the major population centers with the Rogue River region, visitors 500 and more miles away can reach the area in a day.

An estimated 13 million people live within a 12-hour driving radius of the Rogue River (1970 census). Such population centers as Portland, Seattle, Sacramento, and San Francisco are included.

Economy. The present economy of the Rogue River Basin is dependent upon the use of its abundant natural resources. Timber, minerals, land, and water are the principal resources.

Timber operations are the major industry in the basin, with recreation and agriculture competing for second place. Initially, the economy of the basin was based upon gold mining. As mining activity declined, agriculture gained importance and was the most important activity until 1940 when the timber industry became the principal economic activity.

Today approximately 2,500,000 acres of land within the basin are timbered, with about 95 percent of this area capable of producing marketable timber.

In 1953, total recreation visits within the basin were estimated to be 1,725,000 with a total value of \$14 million. This rose to be an estimated 3,280,000 visits with an estimated value of \$27,800,000 in 1963. More recent figures have not been compiled but, because of the rapid growth of outdoor recreation, present expenditures undoubtedly exceed the above figures.

The major agricultural enterprises are located on irrigated lands in Jackson and Josephine Counties. Livestock, dairy products, poultry, fruit, specialty crops, field crops, and vegetable truck gardens are the principal products.

RIVER USES

Boating. The Rogue was first traveled downstream from Grants Pass to the ocean in 1915. The first trip upstream from the ocean to Grants Pass was made in 1947. Since that time, improvements in boats and motors have allowed use to increase to the point where future regulations of boat use can now be foreseen.

There are three main types of boat use on the river. The unique jet boats that make daily trips from the coast to Agness or Paradise Bar and back carry about 40,000 people annually. An additional 10,000 people annually enjoy a jet boat trip from Grants Pass to Hellgate and return.

Commercially guided float trips beginning in the Grants Pass area carry an additional 2,000 persons. White-water boating, the ulti-

mate experience for many river users, is available in a 55-mile stretch from Finley Bend to Agness. There is a new challenge around every bend in this stretch. Float trips in rubber rafts or kayaks are fast becoming popular.

An unknown, but substantial, number of people use private boats for fishing, sightseeing, or just pleasure boating. There are several boat-launching sites available to the public.

Below Paradise Bar, the commercial operators transport people and supplies upstream from Gold Beach with power boats. This practice is established and is publicly accepted in this locale. Another source of power boat use in this section of the river is sport fishing, both with and without guides.

Fishing. The Rogue River is internationally renowned for its outstanding salmon and steelhead trout fisheries. It is a "big fish" river which produces salmon upward of 40 pounds and steelhead exceeding 15 pounds. In excess of 100,000 salmon and steelhead spawn in the Rogue River Basin annually. The character of the Rogue River, its setting and the characteristic of the anadromous salmon and steelhead provide the fisherman with a diverse fishing opportunity. Anglers use bait, hardware, or flies and fish from the shore or by wading, trolling, or floating.

Camping. Camping and picnicking facilities are located at numerous sites along the river. Most are located between Grants Pass and Marial. Of those, 14 are maintained and operated by the Josephine County Park Department and seven are operated by the BLM in conjunction with the hiking trail. The Forest Service maintains two campgrounds on the lower stretch of the river. All sites are also shown in the Appendix, Tables 1 and 2.

Presently, the wild river area gets two types of camping pressure—hikers and raft or inflatable boat floaters. The hikers usually travel in small groups and need only a limited space and drinking water to make camp. The floaters, however, travel in groups of 50 people or more at a time and need a much larger site.

There are several private lodges between Grants Pass and Gold Beach. Most of these operate wholly to meet the necessities of downriver, guided float trips originating in the Grants Pass area.

MANAGEMENT OBJECTIVES

ENTIRE RIVER

Each component of the National Wild and Scenic Rivers System shall be administered in such manner as to protect and enhance the values which caused it to be included in said System without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration, primary emphasis shall be given to protecting its aesthetic, scenic, historic, archeologic, and scientific features. Other resources may be utilized and other activities permitted to the extent that they do not have a direct and adverse effect on the wildlife habitat, river fishery, scenic attractions or recreational value. Management plans for any such component may establish varying degrees of intensity for its protection and development based on the special attributes of the area.

Special efforts will be made to (1) maintain or improve the quality of water which empties in the river, (2) improve the fish and wildlife habitat, and (3) maintain its free-flowing condition.

WILD AREA

The wild area will be managed to (1) provide river-oriented recreation opportunities in a primitive setting, and (2) preserve the

river and its immediate environment in a natural, wild, and primitive condition essentially unaltered by the effects of man.

SCENIC AREA

The scenic river area will be managed to (1) maintain or enhance the condition of the high-quality scenery and the largely undeveloped character of the shoreline, (2) provide opportunities for river-oriented recreation which is consistent with its largely undeveloped nature, and (3) utilize other resources and permit other activities which maintain or enhance the quality of the wildlife habitat, river fishery, scenic attraction or recreational values.

RECREATIONAL AREA

The recreational river area will be managed to provide or restore a wide range of public outdoor recreation opportunities and water-oriented recreational facilities.

MANAGEMENT DIRECTION

Management direction statements explain how the management objectives for the river will be met. The directions for each subject begin with statements of a general nature and apply to the entire river. Additional or modifying directions specific to an individual river area are contained in that portion of the statement specifically identified by a river area designation.

To understand the total impact of the directions under which an individual river area will be managed, both the general and specific statements must be considered.

Unless otherwise specified, the management directions apply to both private and Federal lands.

Other legislation, regulations, plans, recommendations, and policies have been developed regarding the Rogue River and its bordering lands. The agencies will cooperate and coordinate with other Federal, State and local governments in appropriate activities and programs within the river boundaries.

SOIL AND WATERSHED

Entire area. Water and soil are the two basic elements which make a river and its banks. The condition of both is important in that they effect all the other uses and activities in the area.

The following management direction is aimed at maintaining or improving the condition of the soil, water, and watershed.

Make soil studies to guide planning and location of future improvements, operations, and developments.

Scenic easements on critical soil areas of privately-owned lands will be acquired to protect those areas exhibiting clear and present potential for deterioration if disturbed or where serious deterioration is presently occurring.

Stabilize or revegetate all areas of exposed soils caused naturally or by man's activities. Place special emphasis on preventing and controlling soil erosion near the water's edge.

Alteration of the stream bed will be limited to that necessary to maintain current levels of navigability. Permission must be obtained from the agency having jurisdiction before alteration is allowed. Modification of bedrock will not be permitted.

Allow no surface dumping of garbage or other potential pollutants. Waste material must be disposed of in a manner that does not contaminate ground or surface water.

Sewage disposal systems must meet or exceed the State and county sanitation requirements.

Cooperate with the Oregon State Department of Environmental Quality to achieve compliance with the Rogue River Water Quality and Waste Treatment standards.

Coordinate with the Army Corps of Engineers concerning releases from upstream

reservoir facilities to benefit fishery resources and recreational use.

FISH AND WILDLIFE

Entire area. Prepare habitat management plans for fish and wildlife:

(1) Provide management guidelines that emphasize protection of species considered to be rare or endangered.

(2) Direct management toward providing the maximum number of wildlife sightings along the river and trail consistent with good management practices.

Manage other resources along the river so that the fishery is enhanced, not diminished by siltation or an increase in water temperature.

Cooperate with Oregon State Game Commission in all matters relating to fish and wildlife management.

MINERALS

Entire area. Subject to future regulations, all prospecting, mining operation, or other activity relating to mineral exploration or production on valid mining claims will be administered under the criteria established by the Wild and Scenic Rivers Act.

Determine the validity of all mining claims. Access routes to mining claims will be judged on the basis of minimum adverse affect on values of the river area.

Mining or associated operations contributing amounts of noise, smoke, dust, or other elements detrimental to the river environment may be required to limit operations during peak recreation use periods each year.

Removal of mineral materials known as "common varieties" for commercial purposes from the riverbed or adjacent bars will not be allowed subject to valid existing rights. Before any gravel is disturbed, precautions must be taken to eliminate siltation or maintain siltation at an acceptable level and approval obtained from the Oregon State Game Commission in cooperation with other State and Federal agencies.

Where existing material removal operations are adversely affecting recreational values on the river, purchase of the mining rights on these sites will be sought as rapidly as possible. Early acquisition of scenic easements on remaining undeveloped deposits will also be pursued.

The agencies will cooperate with the Oregon State Land Board in meeting the objectives of the Act, where State-owned lands are involved.

The agencies will cooperate with the Oregon State Department of Environmental Quality to control water pollution caused by mining activities, including those beyond the river boundaries.

PROTECTION

Entire area. Due to the roadless character along segments of the river and the need to maintain this character, special protection requirements are established. The unique and irreplaceable values involved demand the employment of all necessary means to insure prompt control of wild fires. Criteria for protection are as follows:

Plans will be developed for prevention, detection, and suppression of wild fire and disease or insect infestations. These plans should emphasize:

(a) Speed in which the above factors can be accomplished.

(b) Methods of accomplishing the above factors which would create the least amount of impact to the environment.

Take restoration action to reduce the impact and return the damaged area to its original condition.

Cooperate with other governmental and private organizations in planning and implementing the protection program.

RECREATION

Entire area. One of the key reasons for including the Rogue River in the National Wild and Scenic Rivers System was to protect and enhance the recreational values which the river possesses. These values are realized in a great variety of activities. They range from an individual pitting only his knowledge and skill against the sometimes hostile forces of nature to recreation uses where the facilities and equipment are so sophisticated that the river can be enjoyed with no special knowledge or skill.

Consistent with the objectives of the individual river areas, sufficient recreation facilities, on both private and Federal land, will be developed to meet the needs of the recreationists. Care will be taken that use levels do not reach the point where the quality of recreation experience or quality of the stream environment deteriorates. Recreationists using the river in groups of larger than 10 people may be required to camp in developed camping sites.

Since boating, fishing, and sightseeing are the main recreational uses on the river, top priority for recreation development will be given to improving the quality of these activities.

A recreation plan will be prepared for the river area. The plan will make a detailed analysis of future recreation needs within the framework of the policies and objectives outlined in this plan. It will be closely coordinated with, and incorporate the plans and proposals of, other governmental agencies and private individuals insofar as they are compatible with the purposes of the Act. The plan will include recommendations concerning the relative roles each might play in meeting the needs of recreationists using the river. It will delineate activity management zones which will be managed under the constraints presented in this plan. As necessary, it will provide the basis for long range development proposals.

Although current levels of all types of boating activity create few problems, uncontrolled future use would probably result in safety hazards and a lowering of the quality of the recreation experience. When the need warrants, this will be prevented by the establishment of regulations limiting size, number, type, speed, etc., to provide optimum boat use. These regulations will be developed in cooperation with the State and other agencies.

Future technological advances may result in new types of equipment that could be used on the river. Only such new types of equipment compatible with management objectives will be permitted.

Wild area. Recreation developments will be of a primitive nature and will include only those facilities necessary for sanitation, safety, fire, and site protection and administrative purposes. Recreation use of the Wild River Area will require a maximum degree of outdoor skills. The absence of man-made developments and the unmodified natural environment will dominate.

Boating regulations to achieve the Wild River objectives will be encouraged. The regulations should:

(1) Favor nonmotorized use. Motorboat use from Watson Creek to Blossom Bar will be held to the use level consistent with that of 1968, the year of the Wild and Scenic River Act.

(2) Allow no regularly scheduled commercial motorized boat trips upstream from the Blossom Bar Rapids.

Recreationists using the area at any given time will be limited to levels consistent with

the Wild River management objectives. No more facilities than are necessary to meet these levels will be provided.

Scenic area. Proposed recreation facilities will be for the use of boaters and hikers since there are no roads in this area. Facilities may offer more convenience and comfort than those in the Wild River Area; however, the natural environment will still dominate. Development will not intrude upon the natural scenic quality that presently exists.

The maximum size of boats using this area of the river will be limited to the 49-passenger jet boat currently approved by the Coast Guard.

Recreational area. Recreation facilities may be developed to provide a wide range of opportunities for river-oriented recreation consistent with management objectives and protection of the river environment.

Private enterprise will be encouraged to develop recreational facilities on lands outside the river boundaries.

Boat size in the Agness and Skookumhouse areas will be limited to the 49-passenger jet boat. The 49-passenger boat will not be permitted above Snout Creek.

No action to regulate boat use will be initiated unless public safety or the recreation experience is threatened. Launching and mooring facilities may be provided within this area.

Agness is the logical place to develop a center for services and supplies for both local residents and the river-using public. Therefore, it will be necessary to allow a greater variety of uses and a higher density of development in Agness and the immediate vicinity than any other place on the river. This must be done in a way which conforms with the purpose and intent of the Act.

ACQUISITION

Entire area. On land that remains in private ownership, compliance with the management directions will be accomplished through acquisition of scenic easements. As used herein, the term scenic easement means purchase of the right to control the use of land (including the air space above such land) for the purpose of protecting the scenic view from the river. Such control shall not affect, without the owner's consent, any regular use exercised prior to the acquisition of the easement.

Scenic easements will be sought to protect the natural environment or setting. Easements will consider protection of the view from the river or its environs as well as protection of critical resources.

Scenic easements will be written so that improvement or alteration of the property or change in land use that may impair the scenic quality or basic resource will require review and approval by the agency having jurisdiction before such activity may begin. Conforming and nonconforming uses of land are covered in this plan in a general way. Specific application of these guides will necessarily be determined on the grounds of a case-by-case basis. An acquisition plan showing justification, needs and purpose of scenic easements will be developed to guide the acquisition program.

Where a scenic easement for a parcel of private land is needed, an attempt will be made to negotiate an easement for all the parcel within the river boundary.

Acquisition of fee title will be considered on any parcel of land that becomes available if it is in the public interest to do so.

Where there is a need and the terrain is suitable, an easement for public access along the banks of the river will be acquired.

Wild and scenic areas. Fee title will be acquired when there is a need for public development or to convert an incompatible use or it is in the public interest to do so.

ACQUISITION

Recreational area. Fee acquisition will not be considered essential, but may be desirable in some instances.

Scenic easements will recognize the existence of more man-made modifications. Easements will be sought if there is a need to control uses that conflict with the basic resource.

In the Agness area, coordination will be sought with Curry County in the development of a plan and zoning ordinance to cover private land within the boundaries.

At such time a zoning ordinance that meets the provisions of the Act is adopted by Curry County, the ordinance will become a part of this plan and will be substituted for all provisions covering private land inside the boundaries in the Agness area. The Forest Service would retain the right to approve any variance or any amendment to the zoning ordinance before it could become effective.

Until the zoning ordinance is adopted, the area within and adjacent to the community of Agness will be administered under the management directions for the rest of the recreational river area.

If Curry County does not adopt a satisfactory zoning ordinance, the Forest Service will prepare a plan and management direction for the private land inside the river boundaries for this area. This plan would be the basis for the development of the Agness area to meet the objectives stated above.

TIMBER

Entire area. The most important value of the timber within the boundaries is in the makeup of the landscape. Timber management, therefore, will be directed toward maintaining or restoring an aesthetically pleasing timber stand.

Removal of timber is not precluded within the boundaries. When timber is to be removed, it will be done in a manner which has the least possible adverse effect on the landscape. Some cutting will be necessary in construction of approved improvements and recreation facilities or to remove hazards. Selective cutting may be allowed in some instances if the operation, including roads, is not visible from the river. There are few areas within the boundaries where this is feasible.

Timber may be removed in cases of a natural catastrophe, such as fire or windthrow with its resultant buildup of insects or natural occurrences of insects or diseases which could become epidemics. If failure to remove affected trees creates an unacceptable fire hazard or threatens to destroy large numbers of trees within the river area or adjacent land, a thorough study will be made to determine the impact of leaving the trees or removing them. The decision on whether to remove the timber will be made after considering all factors and will be based on what will be least destructive to the river area values.

Protection of timber visible from the river or its environs within the river boundaries will be accomplished through scenic easement purchase of the timber on privately-owned lands, or on nonprivate lands through cooperative agreements. Such easements and agreements will not necessarily preclude all cutting of timber but will require prior approval of the agency having jurisdiction. This will be stipulated in the easements and agreements. Each situation will require individual analysis and judgment.

Wild area. Timber cutting will not be allowed within this area except that which is incidental to construction or maintenance of improvements, to eliminate hazards, or in case of a natural catastrophe.

Scenic area. Generally, there will be no timber harvest within this area that is noticeable from the river or its environs. Where the effects of timber harvest are not notice-

able from the river, trails, roads, or recreation sites, timber killed by fire, windthrow, insects, disease, etc., may be removed.

Recreational area. Selective harvest of timber stands within the boundaries may be permitted provided the effects are not apparent to users of the river and the cutting does not affect recreational or aesthetic qualities.

IMPROVEMENTS

Entire area. There are places along the river where new developments or resource improvements may be desirable to meet public needs.

Structures that can be seen from the river, trail, or developed recreation sites will (1) be of an attractive design, (2) have sufficient topography or vegetative screening to make them as inconspicuous as possible, (3) be designed so that little or no soil is left exposed when construction is complete, and (4) contain no direct or indirect design features which are obtrusive or incompatible with the scenic qualities of the area. (A direct design feature is one which is a physical part of the development. Examples of incompatible direct design features are shiny metal siding or roofing, large areas of bright colors, large or lighted signs, etc. An indirect design feature is one resulting from the development. Examples of incompatible indirect design features are noise, smoke, odor, etc.) Structures that cannot be seen from the river will contain no indirect design features obtrusive or incompatible with the scenic qualities of the area and will be designed so that little or no soil is left exposed when construction is complete.

Improvements on private land will be controlled through purchase of scenic easements. Additional recreation residences will not be permitted on public lands.

No new developments except trails, boat ramps, and mooring facilities, including service roads, will be allowed below the high-water line of December 1964, except where the land was covered with slack water and is not visible from the river.

No signs will be erected without written approval of the agency having jurisdiction.

Wild area. In order to keep the river and adjacent lands in an essentially primitive condition, no new structures, except those needed for public recreation or for resource protection, and no new lodges or expansion of existing lodges or commercial public service facilities will be permitted. Any improvements permitted must meet the following criteria:

(1) Public Recreation Developments and Resource Improvements: Design and locate improvements so they are as inconspicuous as possible and in harmony with the environment.

(2) Public Information and Orientation: Assure that signs are rustic, minimum in size and number, and not visible from the river.

Owners of existing structures will be encouraged to maintain them in a condition compatible with the primitive character of the area. Repair or replacement of an existing building will be allowed providing the building remains relatively the same in appearance or is an improvement in making the structure inconspicuous or in harmony with the environment.

New boat docks, moorings, or salmon boards will not be permitted.

Summer home permits in the Marial area will not be renewed and will expire in 1979.

Scenic area. Commercial public service facilities will not be permitted in this area. Residential structures will be permitted providing the stipulations in the entire river section (improvements) are met.

Development will be allowed only where new structures cannot readily be seen from the river.

Single-family structures that are visible and meet the requirements stated under the entire river (improvements) will be limited to a total of two structures on each side of the river in any 1 mile of river frontage. One structure will be allowed on the minimum lot size of 5 acres. A minimum side dimension of 200 feet will be allowed per lot. Developments will be approved on a first-come-first-serve basis. Existing developments will be included in the quota.

No structure shall exceed 30 feet in height from natural grade on the side facing the river.

Recreational area. Structures permitted within the recreational area of the river, provided they are in harmony with their surroundings, are: residential buildings, farmsteads and appurtenant facilities, and lodges or public recreation facilities needed to serve the river user.

There may be instances where it is necessary to locate commercial public service facilities such as gasoline stations, roadside restaurants, and motels within the recreational river boundaries. With the exception of boat-servicing marina operations, developments adjacent to the river will be discouraged. Where other developments are necessary within the boundaries, they will be designed and placed so as to be as unobtrusive as possible. Vegetative screening and topography will be used to keep them from direct view of the river.

Developments will be limited so that no more than four structures on each side of the river will be readily visible in any 1 mile of river frontage, with no structure of one development closer than 200 feet to a structure of another development. Where developments cannot be seen from the river, they will be allowed on the basis of a minimum lot size of 1 acre each, provided sewage disposal can be adequately accomplished. Lots will have a minimum side dimension of 100 feet. Within these limitations, cluster-type developments may be permitted. Existing developments are part of the quota.

On lots of less than 1 acre which existed prior to October 2, 1968, the owner may construct a single-family dwelling on the same basis as if the lot was 1 acre or more.

Other structures will be permitted where necessary for the administration of the river or essential to accomplish other activities allowed in this area.

Construction and placement of salmon boards on private lands where they have not been used before will be regulated through scenic easement purchase. To be permitted, they must be of attractive design and must not obstruct navigation. They should not become so numerous as to affect other recreational uses of the river. Their use on public lands may be allowed under permit from the administering agency. They will be removed each year by June 15 and stored out of sight.

TRANSPORTATION

Entire area. Existing roads and bridges affect the quality of the landscape along the river.

Great care will be taken in the location and design of any future roads to assure they are not visible in a way that would detract from the river environment.

Construction of roads, trails, or tramways will be controlled on private land through scenic easements. Approval of construction will be determined on a case-by-case basis.

No additional airstrips or railroads will be permitted.

Helispots may be located only in locations out of view of the river, trail, or recreation sites and where they do not adversely affect the recreation experience.

There will be no additional bridges or cable crossings across the Rogue River with the

possible exception of a foot bridge or ferry at Agness.

Public use of the trail system, existing and proposed, will be restricted to hikers only.

Roads and trails will be constructed to the minimum safe standard consistent with the intended use. Public roads will be treated to eliminate dust when deemed necessary by the administering agency.

Transportation plans will be reviewed and updated periodically to reflect the management objectives for the Wild and Scenic River.

Wild area. Except in the event of a natural catastrophe in which the decision may be made that roads are necessary, there will be no construction of new roads. If roads must be built, they will be closed and obliterated as soon as the need is past.

The road at Marial will not be improved to more than the minimum safe single-lane standard for the types and levels of traffic which it currently receives. It will not be extended past its present location. No additional trailhead capacity will be provided.

Relocating the Rogue River Trail from approximately Dans Creek to the downstream boundary of the Wild Area should be considered in the transportation plan.

A proposal shall be considered to replace foot bridges washed out on five tributary streams during the 1964 flood.

Heliports and helispots will be established only as needed for emergency administration.

Termination of the use of existing airstrips will be encouraged.

Scenic area. There will be no construction of new roads except as needed for temporary access for fire control purposes or removal of trees killed by fire, windthrow, insects, and disease, as specified under Timber.

The existing Tom East Creek Road will be obliterated.

The existing trail will be reconstructed or relocated as needed to provide a trail the length of the Scenic River Area. This trail shall connect with the existing trail at both ends. Location of the trail within the Scenic Area will be aimed at providing the user a wide variety of experience and to take advantage of scenic view points.

Helispots will be allowed as needed for administration.

Recreational area. New roads needed for developments will be permitted providing the design, location and standards are such that the least impact on the environment is assured. Additional through roads paralleling the river will not be permitted.

USFS will not extend the road on the north side of the river past the west boundary of sec. 35, T. 35 S., R. 13 W., Willamette Meridian.

The Rogue River Trail downstream from the Wild River Area shall be reconstructed or relocated as necessary.

Parking areas will be located out of sight of the river or recreation sites. Screening will be provided if necessary. If there is any other suitable nearby place to park, parking will not be permitted on the gravel bars in view of the river. Where there is no suitable alternative, vehicles will be parked where they are least conspicuous.

UTILITIES

Entire area. With a few exceptions along the recreational river areas, existing utility development along the river has had little adverse affect on recreational and scenic values. However, construction of additional developments and expansion of existing ones will increase the need for additional utilities. Construction of new utilities will be done in such a way that the scenic and recreational values are not degraded.

Try to locate all new utility lines out of view of the river or its environs. Where this

is not possible, the visual impact will be reduced by use of screening, color, non-reflective hardware and conductors and treatment of the new utility corridor. Reduction of visual impact of existing lines should be encouraged.

Where feasible, utility lines will be buried.

Power-generating equipment will be located and designed so that it cannot be seen or heard from the river.

If possible, existing and proposed utility lines will be grouped so the number of right-of-way corridors and aerial crossings of the river are reduced. The possibility of attaching new utility lines to bridges should be investigated.

Where necessary for protection of the scenic quality of the river front, scenic easement purchase of the right to construct utilities visible or audible from the river will be undertaken. This includes power generating equipment.

Wild area. No additional above-ground utility lines will be permitted.

Scenic area. No utilities that can be seen from the river or its environs will be allowed.

VISITOR INFORMATION

Entire area. The Rogue River is rich in history and natural features. There is a tremendous opportunity to identify these features and interpret them for the education and enjoyment of the public.

To accomplish this, a study will be undertaken to identify and interpret significant features along the river. This study will form the basis of an effective program of information and interpretation for recreation users of the river. Manned visitor information stations will be needed in the Hellgate Recreation area and at the confluence of the Illinois and Rogue River.

GRAZING

Entire area. Presently, there is very little grazing land within the river boundaries. Private land now in pasture is compatible with the scenic qualities of the river and may continue to be used for that purpose.

BORDERING LANDS

The area within view of the river extends beyond the river boundaries in many places. Preservation of the scenery within this area is an established management objective. The administering agencies will manage the resources to protect the aesthetic and recreational qualities of the area visible from the river or trail. There will be intensive coordination and analysis of resources before any activity is authorized within the bordering lands.

Although timber cutting is restricted, it is allowed if done in accordance with the management objective and does not pollute the Rogue or its tributaries.

APPENDIX B

LANDS INCLUDED WITHIN RECREATIONAL RIVER BOUNDARIES

Willamette Meridian

T. 34 S., R. 7 W.,

- Sec. 6, lots 4, 5, 6, and 7;
- Sec. 18, lot 4, SW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$;
- Sec. 19, lots 1, 2, 3, and 4, W $\frac{1}{2}$ E $\frac{1}{2}$ NW $\frac{1}{4}$;
- Sec. 30, lot 1 including a portion of M. S. No. 734, Robert Dean Placer Claim;
- Sec. 31, lot 4, SE $\frac{1}{4}$ SW $\frac{1}{4}$, W $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$.

T. 34 S., R. 8 W.,

- Sec. 1, lots 8, 9, 10, 11, 12, and 13, SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$;
- Sec. 11, SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$;
- Sec. 12, lots 1, 2, 3, 4, 5, 6, 7, and 8, NW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$;

Sec. 13, lots 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, and 13, NE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$, M. S. No. 796 Grubstake, portions of M. S. No. 389 Holy Terror, M. S. No. 433 Goss, M. S. No. 511 Mattison Placer;

Sec. 14, E $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$;

Sec. 24, lots 1, 3, 4, 5, and 8, portions of M. S. No. 511 Mattison Placer, portion of M. S. No. 389 Holy Terror, portions of M. S. No. 433 Goss, M. S. No. 404 El Rio Ore and Magnolia;

Sec. 25, lots 1, 2, 3, 6, 8, and 9, SE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$, portion of M. S. No. 734 Robert Dean Placer claim;

Sec. 36, lots 1, 2, 6, 7, 8, 10, 11, 12, 13, and 14, NE $\frac{1}{4}$ NE $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$, W $\frac{1}{2}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$, portion of M. S. No. 865 Genevieve Placer.

T. 35 S., R. 7 W.,

Sec. 3, S $\frac{1}{2}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$;

Sec. 4, lots 5, 6, 7, 8, 9, 10, and 11, S $\frac{1}{2}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$;

Sec. 5, lots 5, 6, 7, 8, 9, 10, 11, 12, and 13, SW $\frac{1}{4}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$;

Sec. 6, lots 1, 2, 3, 4, 5, 6, 9, 10, 11, 12, and 13, SE $\frac{1}{4}$ NW $\frac{1}{4}$;

Sec. 7, that portion of the NE $\frac{1}{4}$ NE $\frac{1}{4}$ lying north and east of the Merlin-Galice Road.

Sec. 8, NW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$, NW $\frac{1}{4}$ NW $\frac{1}{4}$;

Sec. 9, lots 1 and 2, N $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$;

Sec. 10, lots 1, 4, 5, 6, 7, and 8, all those portions of land in lots 2, 3, and the SE $\frac{1}{4}$ NE $\frac{1}{4}$ lying south and west of the Merlin-Galice Road, N $\frac{1}{2}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$;

Sec. 11, lots 2 and 3, that portion of lot 1 lying south and west of the Merlin-Galice Road, that portion of the SE $\frac{1}{4}$ SW $\frac{1}{4}$ lying west of the Merlin-Galice Road;

Sec. 14, lots 1, 2, 3, 4, 5, 6, 7, and 8, NE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$, that portion of the NW $\frac{1}{4}$ NE $\frac{1}{4}$ and the NE $\frac{1}{4}$ NW $\frac{1}{4}$ lying south and west of the Merlin-Galice Road;

Sec. 15, NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$;

Sec. 23, lots 1, 2, 3, 4, 6, and 7, that portion of lot 5 lying north and east of Paradise Gardens Road, W $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ W $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$, that portion of the SE $\frac{1}{4}$ NW $\frac{1}{4}$ lying north of Paradise Gardens Road and east of the Pickett Creek Road;

Sec. 24, lots 1, 2, and 3, S $\frac{1}{2}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$;

Sec. 25, lots 1, 2, 3, and 4, N $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$, that portion of lot 5 and DLC No. 37 lying south of the Lower River Road;

Sec. 26, lots 1, 2, 3, 5, and 6, that portion of lot 4 lying east of the Riverbank Market Road and the Pickett Creek Road, E $\frac{1}{2}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$;

Sec. 35, lots 1, 2, 3, 4, 5, 9, those portions of lots 6, 7, 8, SE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$, lying south and east of the Riverbank Market Road, an island lying in portions of the S $\frac{1}{2}$ NE $\frac{1}{4}$ and the N $\frac{1}{2}$ SE $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$;

Sec. 36, lots 1 and 2, those portions of DLC No. 37 and DLC No. 38 lying west of the Lower River Road.

T. 35 S., R. 8 W.,

Sec. 1, lots 1, 2, 3, 4 including M. S. No. 865 Genevieve Placer, 5, 6, 7, and 8, NE $\frac{1}{4}$ SW $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$, N $\frac{1}{2}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$.

T. 36 S., R. 6 W.,

Sec. 18, lots 5 and 6, DLC No. 40;

Sec. 19, lots 1, 2, and 3, SW $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$, unnumbered lot NW $\frac{1}{4}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$;

Sec. 20, lots 4 and 5.

T. 36 S., R. 7 W.,

Sec. 1, lot 1;

Sec. 2, lots 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10, SW $\frac{1}{4}$ NE $\frac{1}{4}$, unnumbered lot NE $\frac{1}{4}$ NW $\frac{1}{4}$;

Sec. 11, lots 1, 2, 3, 4, 5, 6, 7, and 8, S $\frac{1}{2}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$, that portion of the SW $\frac{1}{4}$ SW $\frac{1}{4}$ lying east of Rogue River Loop Highway;

Sec. 12, lots 1, 2, and 3, W $\frac{1}{2}$ SW $\frac{1}{4}$;

Sec. 13, lots 1, 5, 6, 7, 8, and 9, N $\frac{1}{2}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$, that portion of DLC No. 37 lying south of a line beginning at the east quarter corner of Section 13 and running northwesterly to the southeast corner of C.S. Survey 44-56 thence 856.5' west and thence 590' north and thence 620' west to the northwest corner of DLC No. 37;

Sec. 14, lots 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10, N $\frac{1}{2}$ N $\frac{1}{2}$ SE $\frac{1}{4}$, that portion of DLC No. 38 lying north of the Rogue River Loop Highway also named Riverbank Road;

Sec. 24, NE $\frac{1}{4}$ NE $\frac{1}{4}$.

APPENDIX B

LANDS INCLUDED WITHIN WILD RIVER BOUNDARIES

Willamette Meridian

T. 33 S., R. 7 W.,

Sec. 31, lot 4;

T. 33 S., R. 8 W.,

Sec. 31, SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$;

Sec. 32, lots 1, 2, 3, 4, 5, 6, and 7, S $\frac{1}{2}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$;

Sec. 33, lots 1, 2, 3, 4, 5, 6, 7, and 8, S $\frac{1}{2}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$, N $\frac{1}{2}$ S $\frac{1}{2}$ SE $\frac{1}{4}$;

Sec. 34, lots 1, 3, 4, 5, 6, 7, 8, 9, and 10, W $\frac{1}{2}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$, M. S. No. 553 Gold Ring;

Sec. 35, lots 9 and 10, M. S. No. 553 Gold Ring, SE $\frac{1}{4}$ SW $\frac{1}{4}$;

Sec. 36, lot 5 and SW $\frac{1}{4}$ SE $\frac{1}{4}$.

T. 33 S., R. 9 W.,

Sec. 8, S $\frac{1}{2}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$, S $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$;

Sec. 15, S $\frac{1}{2}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$;

Sec. 16, lots 1, 2, 3, 4, and 5 W $\frac{1}{2}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$, W $\frac{1}{2}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$, S $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$;

Sec. 17, lots 1, 2, 3, 4, 5, 6, 7, and 8, N $\frac{1}{2}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$, NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$;

Sec. 18, lots 1, 2, 3 including Winkle Bar and Winkle Bar Extension M. S. No. 844, 4 including Winkle Bar and Winkle Bar Extension M. S. No. 844, 5 including Winkle Bar and Winkle Bar Extension M. S. No. 844, 6, 7, 8, 9, 11, 12 and 13, SE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$;

Sec. 21, lots 1, 2, and 3, N $\frac{1}{2}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$;

Sec. 22, lots 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, and 11, S $\frac{1}{2}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$;

Sec. 23, lots 1, 2, and 3, SW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$, W $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$;

Sec. 26, lots 1, 2, 3, 4, 5, 6, 7, 8, and 9, W $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$, W $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$;

Sec. 27, E $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$;

Sec. 35, lots 1, 2, 3 including St. Charles Placer M. S. No. 862, 4, 5, 6 including Boston Placer and St. Charles Placer M. S. No. 862, 7 including Boston Placer M. S. No. 862, 8, 9 and 10, W $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$, W $\frac{1}{2}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$, S $\frac{1}{2}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$;

Sec. 36, lots 1, 2, and 3, SW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$.

T. 33 S., R. 10 W.,

Sec. 9, lots 1, 2, 3, and 4, $S\frac{1}{2}SW\frac{1}{4}NE\frac{1}{4}$,
 $SE\frac{1}{4}NE\frac{1}{4}$, $E\frac{1}{2}NE\frac{1}{4}SW\frac{1}{4}$, $SW\frac{1}{4}NE\frac{1}{4}$
 $SW\frac{1}{4}$, $N\frac{1}{2}SE\frac{1}{4}SE\frac{1}{4}$;

Sec. 10, lots 1, 2, 5, 6, 7, 8, 9, 10, 11, 12, and
 13, $S\frac{1}{2}NE\frac{1}{4}NE\frac{1}{4}$, $SE\frac{1}{4}NW\frac{1}{4}NE\frac{1}{4}$, $NW\frac{1}{4}$
 $SW\frac{1}{4}SW\frac{1}{4}$, $N\frac{1}{2}NE\frac{1}{4}SE\frac{1}{4}$;

Sec. 11, lots 1, 2, 3, 4, 5, 6, 7, 8, and 9,
 $SW\frac{1}{4}NW\frac{1}{4}NW\frac{1}{4}$, $W\frac{1}{2}SE\frac{1}{4}NW\frac{1}{4}$, $SE\frac{1}{4}$
 $SE\frac{1}{4}NW\frac{1}{4}$, $NE\frac{1}{4}SW\frac{1}{4}SW\frac{1}{4}$, $W\frac{1}{2}NW\frac{1}{4}$
 $SE\frac{1}{4}$, $SE\frac{1}{4}NW\frac{1}{4}SE\frac{1}{4}$, $SW\frac{1}{4}NE\frac{1}{4}SE\frac{1}{4}$;

Sec. 12, lots 1 and 2, $W\frac{1}{2}SW\frac{1}{4}SE\frac{1}{4}$, $SE\frac{1}{4}$
 $SW\frac{1}{4}SE\frac{1}{4}$;

Sec. 13, lots 1, 2, 3, 4, 5, 6, 7, and 8, $NE\frac{1}{4}$
 $SE\frac{1}{4}NW\frac{1}{4}$, $NE\frac{1}{4}NE\frac{1}{4}SE\frac{1}{4}$;

Sec. 14, lots 1, 2, and 3, $NE\frac{1}{4}NE\frac{1}{4}NW\frac{1}{4}$.

T. 34 S., R. 8 W.,

Sec. 1, lots 1, 2, 3, 4, 5, 6, and 7, $NW\frac{1}{4}SW\frac{1}{4}$
 $NE\frac{1}{4}$, $NW\frac{1}{4}NW\frac{1}{4}SW\frac{1}{4}$, an island in the
 $SW\frac{1}{4}NW\frac{1}{4}$ (lots 5 and 6);

Sec. 2, lots 1, 2, 3, 4, 5, 6, 7, and 8, $NE\frac{1}{4}$
 $SW\frac{1}{4}NW\frac{1}{4}$, $N\frac{1}{2}SE\frac{1}{4}NW\frac{1}{4}$, $N\frac{1}{2}NE\frac{1}{4}$
 $SE\frac{1}{4}$, an island in the $SE\frac{1}{4}NE\frac{1}{4}$ (lots 7
 and 8);

Sec. 3, lot 1;

Sec. 5, lots 3, 4, and 5, $NW\frac{1}{4}SW\frac{1}{4}NW\frac{1}{4}$;

Sec. 6, lots 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and
 12, $N\frac{1}{2}NE\frac{1}{4}SW\frac{1}{4}$, $NW\frac{1}{4}NE\frac{1}{4}SE\frac{1}{4}$, $N\frac{1}{2}$
 $NW\frac{1}{4}SE\frac{1}{4}$;

T. 34 S., R. 9 W.,

Sec. 1, lots 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10,
 $N\frac{1}{2}N\frac{1}{2}SE\frac{1}{4}$;

Sec. 2, lots 1, 2, and 3;

[FR Doc. 72-10099 Filed 7-6-72; 8:45 am]

Appendix B

Management Guidelines and Standards for the Hellgate Recreation Area

Air Quality

Management Standard: The Hellgate Recreation Area is managed to maintain and improve air quality in accordance with the National Ambient Air Quality Standards, the Clean Air Act, and the Federal Air Quality Criteria.

Management Guideline: The Hellgate Recreation Area is managed to maintain and improve air quality in accordance with the National Ambient Air Quality Standards, the Clean Air Act, and the Federal Air Quality Criteria.

Management Standard: The Hellgate Recreation Area is managed to maintain and improve air quality in accordance with the National Ambient Air Quality Standards, the Clean Air Act, and the Federal Air Quality Criteria.

Aquatic Conservation Strategy

The Aquatic Conservation Strategy is a management plan for the Hellgate Recreation Area. It is designed to protect and enhance the aquatic resources of the area, including the Hellgate River, the Hellgate Lake, and the Hellgate Wetlands. The strategy is based on the following principles: (1) to protect and enhance the aquatic resources of the area; (2) to provide for the enjoyment of the area by the public; and (3) to provide for the conservation of the area's natural resources.

The Aquatic Conservation Strategy is a management plan for the Hellgate Recreation Area. It is designed to protect and enhance the aquatic resources of the area, including the Hellgate River, the Hellgate Lake, and the Hellgate Wetlands. The strategy is based on the following principles: (1) to protect and enhance the aquatic resources of the area; (2) to provide for the enjoyment of the area by the public; and (3) to provide for the conservation of the area's natural resources.

The Aquatic Conservation Strategy is a management plan for the Hellgate Recreation Area. It is designed to protect and enhance the aquatic resources of the area, including the Hellgate River, the Hellgate Lake, and the Hellgate Wetlands. The strategy is based on the following principles: (1) to protect and enhance the aquatic resources of the area; (2) to provide for the enjoyment of the area by the public; and (3) to provide for the conservation of the area's natural resources.

The following include management guidelines and standards direct what will and will not occur within the planning area to achieve the desired goals. These multi-resource standards supplement, but do not replace, other direction found in legislation, policies, or management plans. They are designed to comply with applicable State and Federal laws (see Chapter 1, Management Goals, Guidelines, and Standards for the Hellgate Recreation Area).

Agricultural Practices and Livestock Grazing

Agriculture and livestock grazing on BLM-administered land is not permitted unless it is demonstrated that the activity would be beneficial to the outstandingly remarkable values (ORVs) or other recreational river resources such as wildlife (see Aquatic Conservation Strategy, RMP/ROD, p.81).

Any grazing on private land is encouraged to occur outside the riparian zone.

Supplemental Information - Presently, very little grazing land exists within the river boundaries. Private land now in pasture is compatible with the scenic qualities of the river and may continue to be used for that purpose.

Air Quality

Management standards include meeting the National Ambient Air Quality Standards, Prevention of Significant Deterioration, and the Oregon Visibility Protection Plan and Smoke Management Plan Goals.

Air quality and visibility will be maintained and enhanced in a manner consistent with the Clean Air Act and the State Implementation Plan.

Standards for Class II sensitive air quality areas are applicable to the Hellgate Recreation Area of the Rogue River.

Aquatic Conservation Strategy

The Aquatic Conservation Strategy was developed to restore and maintain the ecological health of watersheds and aquatic ecosystems contained within them on all public lands (USDA and USDI 1994a). The four elements of the strategy are riparian reserves, key watersheds, watershed analysis, and watershed restoration. These components are designed to operate together to maintain and restore the productivity and resiliency of riparian and aquatic ecosystems.

Riparian reserves specify a certain width on each side of fish-bearing, nonfish-bearing, and intermittent streams, as well as around wetlands, ponds, lakes, and unstable and potentially unstable lands. Standards and guidelines for these reserves prohibit or regulate activities not designed specifically to maintain or restore the structure and function of the reserve and benefit fish habitat. Specific standards and guidelines for various resource management activities are included in Appendix B and C of the Final Supplemental Environmental Impact Statement on Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl, Aquatic Conservation Strategy.

Key watersheds contain at-risk anadromous salmonids and/or resident fish species, or are important sources of high quality water. Key watershed designation does not preclude regularly scheduled timber harvest and other management activities. However, watershed analysis is required in these areas before any management activities can occur and the results of the analysis must be incorporated into the decision-making process. The exception is, in the short term and until watershed analysis can be completed, minor activities, such as those that would be categorically

excluded under National Environmental Policy Act regulations (except timber harvest) may proceed, consistent with riparian reserve standards and guidelines.

The watershed analysis section of Appendix B6 to the *Final Supplemental Environmental Impact Statement on Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl*, Aquatic Conservation Strategy, describes procedures for conducting analysis to characterize the aquatic, riparian, and terrestrial features within a watershed. This analysis should enable the watershed planning that achieves aquatic conservation strategy objectives. Watershed analysis provides the basis for monitoring and restoration programs and the foundation from which riparian reserves can be further delineated.

Watershed restoration is a comprehensive, long-term program to restore watershed health and aquatic ecosystems, including the habitats supporting fish and other aquatic and riparian-dependant organisms.

Botanical Resource Protection

Special Status or Survey and Manage (Category A or C) vascular plant surveys would be completed in accordance with approved protocols.

If any Survey and Manage species requiring management of known sites are found, a no-harvest, no-ground disturbance protection buffer will be implemented around each population. Actual buffer size will be dependent on micro-site conditions needed to maintain habitat as required by Northwest Forest Plan Management Recommendations. No slashing and burning would take place within these buffers.

If federal or state listed, candidate, or Bureau Sensitive species are found, a minimum 100-foot radius no-harvest, no-ground disturbance protection buffer will be required. For other Special Status species, a protection buffer will be decided upon on a case-by-case basis, depending on the species' habitat requirements.

Burns in areas containing special status plant species would follow prescriptions that result in "cool" burns, which minimize potential damage to plant populations. Prescribed fire operations would be done in a manner which strives to reduce or eliminate burning through identified Special Status plant population areas depending on the adaptability of each species to fire. Prescribed fire contracts would articulate the necessary steps to reduce or eliminate fires in these sensitive areas.

Commercial Use of Public Lands

Conducting any kind of commercial use on public lands without a special use permit is prohibited. Activity types requiring a permit are outfitter services, movies, business concessions, and photography activities (43 CFR 8372.0-5).

Facility development for commercial uses adjacent to the river are highly restricted. However, there may be instances where it is necessary to locate commercial public service facilities within the recreational river boundaries. Where other developments are necessary within the boundaries, they will be designed and placed so as to be as unobtrusive as possible. Vegetative screening and topography will be used to keep them from direct view of the river.

Supplemental Information - Commercial use is use of the public lands and related waters for business or financial gain. When any permittee, employee, or agent of a permittee, operator, or participant makes or attempts to make a profit, salary, increase his capital worth, advance or promote his business or financial standing, or supports, in any part, other programs or activities

from amounts received from or for services rendered to customers or participants in the permitted activity, as a result of having a special recreation permit, the use will be considered commercial. Any person, group, or organization seeking to qualify as noncommercial shall have the burden of establishing that no financial or business gain will be derived from the proposed use.

Noncommercial use is any recreational use that meets the following criteria:

1. There is a bonafide sharing of expenses.
2. No fees are collected in excess of the actual cost of the trip.
3. There is no financial gain by any member of the group.
4. No salary is directed from shared expenses of the trip.
5. No charge is collected for use of the equipment.

Cultural Resources

Historic and prehistoric resource sites would be identified, evaluated, and protected in a manner compatible with the management objectives of the river and in accordance with applicable regulations and policies. Where appropriate, historic or prehistoric sites would be stabilized, enhanced, and interpreted.

The Medford District Office will continue to consult with the Oregon State Historic Preservation Office, the Advisory Council on Historic Preservation, tribal governments, and other local and federal agencies as appropriate, regarding the location, evaluation, mitigation, and interpretation of cultural sites within the planning area.

Supplemental Information - Cultural resources will be managed in accordance with regulations found in 36 CFR 800, which ensure that federally authorized land use actions do not inadvertently harm or destroy federal or nonfederal cultural resources. Other legislation, especially the Archaeological Resources Protection Act, calls for the identification of cultural resources, together with public awareness programs to explain the significance of those resources.

Fire Protection and Suppression

Management and suppression of fires would be carried out in a manner compatible with contiguous federal lands. On wildfires, suppression methods that minimize long-term impacts on the river and river area will be used. Presuppression and prevention activities would be conducted in a manner that reflects management objectives for the specific river segment. Prescribed fire may be used to maintain or restore ecological condition or meet objectives of the river management plan.

Supplemental Information - Fire management standards for the Bureau of Land Management are described in the Bureau of Land Management, Medford District RMP (USDI 1994). Wildfire suppression would be conducted in a manner that reflects management objectives of maintaining the scenic quality. Prescribed fire use would be allowed when its use maintains or enhances the scenic natural environment.

Due to the roadless character along segments of the river and the need to maintain this character, special protection requirements are established.

- The unique and irreplaceable values involved need prompt control of wildfires.

- Wildfire control would be accomplished with the least amount of impact to the environment.
- Restoration action would be taken to reduce the impact and return the damaged area to its original condition.

Building, Maintaining, Attending, or Using a Fire

The following acts are prohibited (*Federal Register* Vol. 57, No. 110, 24271-24274):

- Carelessly or negligently throwing or placing any burning substance (or any other substance that may cause a fire), firework, or explosive into any place where it might start a fire.
- Causing timber, slash, brush, or grass to burn.
- Leaving a fire without completely extinguishing it.
- Allowing a fire to escape from control.
- Building, attending, maintaining, or using a campfire without adequately removing all flammable material from around the campfire, which could allow its escape.
- Failing to observe State fire closure regulations or notices issued by the Oregon State Department of Forestry.

Fish

Protect fish species considered to be threatened or endangered.

Manage resources and visitors to enhance the fishery.

Fish and Wildlife Habitat Improvement

The construction and maintenance of minor structures for the protection, conservation, rehabilitation, or enhancement of fish and wildlife habitat are acceptable provided they do not affect the free-flowing characteristics of the river, are compatible with a recreational river classification, allow the area to remain natural in appearance, and harmonize with the surrounding environment.

Forestry Practices

The public lands are unavailable for planned forest management, except as part of strategies to enhance the outstandingly remarkable values for which the river was designated.

Supplemental Information - The most important value of the timber within the boundaries is in the makeup of the landscape. Timber management, therefore, will be directed toward maintaining or restoring an aesthetically pleasing timber stand.

- Removal of timber is not precluded within the boundaries. When timber is to be removed, it will be done in a manner that has the least possible adverse effect on the landscape.
- Timber may be removed in cases of natural catastrophe, such as fire or windthrow with its resultant buildup of insects or natural occurrences of insects or diseases, which could become

epidemics. The decision on whether to remove the timber will be made after considering all factors and will be based on what will be least destructive to the river area values.

- Protection of timber visible from the river or its environs within the river boundaries will be accomplished through scenic easement purchase of the timber on privately-owned lands or on nonprivate lands through cooperative agreements. Each situation will require individual analysis and judgement.
- Selective harvest of timber stands within the boundaries may be permitted provided the effects are not apparent to river users and the cutting does not affect recreational or aesthetic qualities.

Hazardous Materials

Hazardous materials management would be according to the Comprehensive Environmental Responsive Compensation and Liability Act of 1980 and as amended by the Superfund Amendment and Reauthorization Act of 1982. It would include emergency removal, sampling and analysis, safety and law enforcement staff involvement, and potentially responsible party search for cost recovery.

Supplemental Information - The BLM's response to the release or threat of release of hazardous materials that could affect human health or the environment would be limited to BLM-administered lands. Hazardous materials release on other lands would be subject to local response in accordance with the Oregon Department of Environmental Quality rules and statutes.

Health and Safety

Management actions would be taken to prevent, stop, or reverse any significant health or safety hazard caused by human use.

Alteration of the stream bed and vegetation manipulation will be limited to that necessary to maintain safe navigation. Modification of bedrock will not be permitted. All actions will be designed for the protection and management of the outstandingly remarkable values (ORVs).

Supplemental Information - Sites of concern exist along the Rogue River. Specific portions of the river, due to physical conditions, create reduced jet boat/motorized tour boat options that could result in accidents or unacceptable close encounters with other boat traffic, even when best operator skill and most prudent judgements are used.

Gravel can shift and brush can grow creating new sites of concern or changing the conditions of existing sites of concern. It is a common condition for river gravel to move during high flow conditions. River channels may change and gravel may be shifted and deposited in different configurations. These changes in the river bottom can lead to restricted depth and width, creating conditions that are dangerous and even impassable for motorized tour boats and other jet boats and deep draft watercraft. In areas needed, it is possible, with the use of heavy equipment, to reposition the gravel to eliminate this safety problem. It may at times be necessary to move gravel with mechanized equipment to provide for safe passage of motorized boats through safety sites of concern and other areas where gravels may accumulate.

Safety at sites of concern may also be improved by cutting vegetation, a historical practice in the Hellgate Recreation Area, when the line-of-sight is obscured by growing riparian vegetation. Drought and the lack of major scouring floods has enabled the riparian vegetation to flourish (WRC 1995).

Hydroelectric Power

No development of hydroelectric power facilities would be permitted.

Water Withdrawal for Domestic or Agricultural Use

Supplemental Information - Pump screening standards vary. Each situation is different. The goal is to screen the pump and pipes so they blend into the natural surroundings. In some cases, careful placement of the pump may be all that is necessary. The size of the pump and the type of pump (diesel or electric) would be important factors in developing adequate screening. Brush or shrubs would usually be helpful for visual screening.

The landowner has no responsibility to screen a pump if the pump was in use at the time the scenic easement was acquired. The BLM has the right to screen existing pumps. New pumps on private or BLM-administered lands are required to be screened by the owner.

Sound can be reduced or eliminated by the type of pump and its placement by enclosures.

Improvements

There are places along the river where new developments or resource improvements may be desirable to meet public needs.

Structures that can be seen from the river, trail, or developed recreation sites will:

- Be of aesthetic design.
- Have sufficient topography or vegetative screening to reduce visual impacts of improvements.
- Be designed so that little or no soil is left exposed when construction is complete.
- Contain no direct or indirect design features that are obtrusive or incompatible with the scenic qualities of the area. A direct design feature is one which is a physical part of the development (i.e., shiny metal siding or roofing, large areas of bright colors, large or lighted signs). An indirect design feature is one resulting from the development (i.e., noise, smoke, odor). Structures that cannot be seen from the river will contain no indirect design features obtrusive or incompatible with the scenic qualities of the area and will be designed so that little or no soil is left exposed when construction is complete.
- Be controlled on private lands through the purchase of scenic easements.
- Additional recreation residences will not be permitted on public lands.
- Have no new developments, except trails, boat ramps, mooring facilities, and service roads, below the high-water line of December 1964, except where land was covered with slack water and is not visible from the river.

Structures are permitted provided they are in harmony with their surroundings: residential buildings, farmsteads and appurtenant facilities, and lodges or public recreation facilities needed to serve the river user.

Where other developments are necessary within the boundaries, they will be designed and placed so as to be as unobtrusive as possible. Vegetative screening and topography will be used to keep them from direct view of the river.

Other structures will be permitted where necessary for the administration of the river or essential to accomplish other activities allowed in this area.

Insects, Diseases, and Noxious Weeds

Any control of forest and range land pests, diseases, and noxious weed infestations would be carried out in a manner compatible with the intent of the Act and management objectives of contiguous federal lands.

Instream Flow Assessment

To the extent practical and consistent with resource management objectives, instream flow and protection requirements will be quantified related to outstandingly remarkable and other resource values.

The Oregon Water Resources Commission determined streamflows necessary for recreation, fish, and wildlife uses within scenic waterways for the Rogue River on October 3, 1991. The following are the approved waterway flows in mean minimum monthly flow (cfs) as measured near Agness, Oregon (gauge # 14372300).

Month	Flows
January	3,500
February	3,500
March	3,500
April	3,500
May	3,000
June	2,700
July	2,000
August	2,000-2,400
September	2,400-1,600
October	1,600
November	1,600-3,500
December	3,500

Instream Flow Assessment for the Natural Scenic Quality Outstandingly Remarkable Value

The instream flow requirement for natural scenic qualities is the natural flow.

Instream Flow Assessment for the Fisheries Resource Outstandingly Remarkable Value

In an average water year, the instream flow assessment requirement for the fisheries resource is the Oregon Water Resources Commission's approved waterway flows for recreation, fish, and wildlife uses. In a low water year, the requirement for fisheries is the flow as identified in flow release plans approved by the United States Army Corps of Engineers through the Rogue River Basin Water Management Advisory Group.

Instream Flow Assessment for the Recreation Opportunities Outstandingly Remarkable Value

The monthly summer flows at the time of the passage of the Wild and Scenic Rivers Act and prior to the construction of the Lost Creek and Applegate reservoirs averaged 1,000 cfs at Grants Pass, Oregon. In general, this minimum summer flow meets the downstream needs of recreationists.

Supplemental Information - The minimum summer flow meets the needs of recreationists in the Hellgate Recreation Area (i.e., at a minimum, summer inflows to the reservoirs being released as outflows). This minimum flow restricts motorized tour boat traffic from using the Dunn Reach. This was the historical condition at the time the Wild and Scenic Act was passed in 1968 and through 1977 before summer flows were augmented by water releases from the dams.

Interpretation

An interpretive program will assist in the accomplishment of management objectives. The information and education facets of the interpretation program will, in particular:

- Help the river visitor enjoy a safe and rewarding experience.
- Increase visitor awareness regarding natural, cultural, and historic resources of the area.
- Develop and maintain rapport among the BLM, other involved agencies, and the public.
- Develop a system for on-the-ground identification of public lands.
- Facilitate recreational use of the corridor and assist visitor management.

Supplemental Information - The Rogue River is rich in history and natural features. There is a tremendous opportunity to identify these features and interpret them for the education and enjoyment of the public.

An interpretive program will make public outreach effective for information and interpretation for recreation users of the river.

Land Tenure Adjustments and Acquisition of Lands or Interest in Lands

All of the BLM lands within the river corridor are in RMP land tenure zone 1 and will be retained in public ownership (RMP/ROD p.81).

On land that remains in private ownership, compliance with some of the management directions will be accomplished through acquisition of scenic easements (see Scenic Easement Program).

Lands

There are regulations and policy direction for the management of the public lands and the BLM interests on nonpublic lands. BLM interests on nonpublic lands include, but are not limited to, scenic easements, road easements, and road use agreements.

Supplemental Information - The Federal Land Policy and Management Act (1976) is BLM's primary law pertaining to various land use authorizations. However, previous laws allowed other land uses within the river corridor. All land policies would be tailored to protect and manage the river's ORVs.

Types of land use authorizations and management authorities include:

- Right-of-way grants – may be issued for the construction, use, and maintenance of roads, pipelines, powerlines, reservoirs, telephone lines, communication sites, etc. New transmission

lines, natural gas lines, and water lines, etc. are discouraged unless specifically authorized outright by other plans, orders, and laws. Where no reasonable alternate location exists, additional or new facilities should be restricted to existing rights-of-way. Where new rights-of-way are unavoidable, locations and construction techniques would be selected to minimize adverse effects on ORVs and fully evaluated during the site selection process.

- Land use permits – short term (three years or less) authorizations for uses that cause little or no environmental damage to the public lands and involve little or no improvements or financial commitments.
- Land use leases – may be authorized allowing the long-term lease of public lands for habitation, cultivation, and use for trade and/or manufacturing sites. Leases are issued for uses that cause some surface disturbance and may cause environmental impacts to the public lands. They involve improvements to the land and considerable financial commitments.
- Recreation and Public Purposes Act (R&PP) leases and patents – authorizes the leasing and patenting (deeding) of public lands to nonprofit groups and governmental agencies. The Act authorizes the BLM to lease and/or convey public lands for recreational and public purposes under certain conditions.
- Unauthorized uses – unauthorized uses of the public lands occasionally occur as a result of the encroachment by private landowners adjacent to the public lands. Actions taken in the resolution of trespass cases include: collection of damages, removal of improvements from the lands, issuance of citations, or authorization of the activity by a land use authorization.
- Land disposals – the disposal of public lands through direct sale and through land exchanges may occur.
- Residential occupancies.
- Land withdrawals.
- Acquired lands.

With a few exceptions, existing utility development along the river has had little adverse affect on recreational and scenic values. However, construction of additional developments and expansion of existing ones will increase the need for additional utilities. Construction of new utilities will be done in such a way that the scenic and recreational values are not degraded.

Try to locate all new utility lines out of view of the river or its environs. Where this is not possible, the visual impact will be reduced by use of screening, color nonreflective hardware and conductors, and treatment of the new utility corridor.

- Reduction of visual impact of exiting lines should be encouraged.
- Where feasible, utility lines will be buried.
- Power-generating equipment will be located and designed so that it cannot be seen or heard from the river.
- If possible, existing and proposed utility lines will be grouped and aerial crossings of the river are reduced. The possibility of attaching new utility lines to bridges should be investigated.

- Where necessary for protection of the scenic quality of the river front, scenic easement purchase of the right to construct utilities visible or audible from the river will be undertaken. This includes power generating equipment.

Mineral Withdrawals along the Rogue River

Beginning in 1958, several land and mineral withdrawals were formally placed on the lands administered by the BLM and Forest Service at or near the present HRA. Those withdrawals were made to guide future management activities and land uses on the Rogue River. Each withdrawal was written for specific lands and limited specific uses and appropriations of the lands under the public land laws, the General Mining Law, and mineral leasing laws.

The designation of the Rogue River as Wild and Scenic in 1968 automatically withdrew the lands within the designated recreation corridor of the river from appropriation under the public land laws, however, that withdrawal did not limit entry under the General Mining Laws or Mineral Leasing Act.

Prior to the designation of the Rogue River as a Wild and Scenic River in 1968, a majority of lands within and adjacent to the river were withdrawn from mineral entry in 1958 by Public Land Order 1726. PLO 1726 closed lands in order to protect and preserve the scenic and recreation areas adjacent to the Rogue River and its tributaries (see Map 3-4).

The section of the Rogue River between Almeda Mine and Grave Creek was also withdrawn by PLO 1726, however, those lands were only withdrawn from entry under the public lands laws, and not from entry under the General Mining Laws or mineral leasing laws. In other words, those lands remained open to the location of mining claims. Four mining claims currently exist within this section of the HRA.

Mining, Minerals and Energy Resources

Subject to existing regulations, such as 43 CFR 3809, and any future regulations the Secretary of the Interior may prescribe to protect values of rivers included in the National Wild and Scenic Rivers System, existing operations or new operations are allowed to continue on existing mining claims and new mining claims located in areas not currently withdrawn.

Supplemental Information - Most BLM-administered lands within the Hellgate Recreation Area are closed to locatable mineral entry. Those lands open to mineral entry are subject to surface management restrictions as defined by the 3809 regulations. A plan of operations for any mining activity within the HRA is required.

A withdrawal from mineral entry would be pursued for that portion of the Rogue River from Yew Wood Creek to Grave Creek to conform with withdrawal of other segments of the designated river section and to conform with the Medford District RMP.

All mineral activity on BLM-administered land must be conducted in a manner that minimizes surface disturbance, water sedimentation and pollution, and visual impairment. Reasonable mining claim and mineral lease access will be permitted.

Digging, scraping, disturbing, or removing natural land features for the purpose of mineral prospecting or mining is allowed for: (1) valid existing mining rights, (2) recreational gold panning that does not require digging into the bank, or (3) the use in accordance with State law and regulations of a four-inch diameter or less motorized suction dredge in the river channel. Suction

dredges are restricted to operations below water level and within existing banks.

Supplemental Information - All prospecting, mineral exploration, or production on valid mining claims will be reviewed to determine if it can occur without impacting the values established by the Wild and Scenic Rivers Act.

- The validity of all mining claims may be determined by the BLM.
- Access routes to mining claims will be judged on the basis of minimum adverse affect on values of the river area.
- Mining or associated operations contributing amounts of noise, smoke, dust or other elements detrimental to the river environment may be required to limit operations during peak recreation use periods each year.
- Removal of mineral materials known as “common varieties” for commercial purposes from the riverbed or adjacent bars will not be allowed subject to valid existing rights. Before any gravels are disturbed, precautions must be taken to eliminate siltation.
- Where existing material removal operations are adversely affecting recreational values on the river, purchase of the mining rights on these sites will be sought as rapidly as possible. Acquisition of scenic easements for remaining undeveloped deposits on private lands will be pursued.

Salable Minerals, Leasable Minerals and Energy

The BLM managed portions of the river corridor are available to mineral and energy leasing only with a no surface occupancy stipulation. There are no current leases in the corridor. Oil and gas potential is moderate to high. Geothermal resource potential is low (RMP/FEIS/ROD 1995).

Motorized Travel

Motorized travel on land would generally be permitted on existing roads. Controls would usually be similar to that of surrounding lands. Motorized travel on water will be in accordance with existing regulations or restrictions.

Supplemental Information - Motorized travel on the Rogue River is a traditional use in the Hellgate Recreation Area. Motorized boating is encouraged to the extent consistent with the protection of the river environment. Motorized boating may be regulated and distributed where necessary to protect and enhance the ORVs. It may also be regulated for safety reasons (e.g., restrictions at low water flows).

Natural Scenic Qualities

The natural beauty and character of the river corridor will be protected, enhanced, and maintained through effective visitor and land use management.

Supplemental Information - Recognition of the Rogue River’s outstanding scenery has been focal to descriptions of the river and its environment since European settlers first arrived in the valley. The first active management efforts to protect the river’s scenic beauty began in 1958. The BLM and the United States Fish and Wildlife Service concurred, through a cooperative agreement, that the river and its immediate environment should receive a different and more sensitive type of management than the surrounding lands. As concern for the preservation of free-flowing rivers

increased and the Wild and Scenic Rivers Act was passed in 1968, active and effective protection of the natural scenic qualities began in earnest. With the purchase of scenic easements on all private properties and establishment of restrictive management mandates on public land, the river and its scenic corridor received a level of protection necessary and adequate to preserve the Rogue River's famous beauty.

The BLM Scenic Easement Program maintains or even enhances the protection of this important outstandingly remarkable value. Past and ongoing management methods are specifically designed to protect the wide array of aesthetic resources that make the Rogue River special.

The BLM-administered lands within the Hellgate Recreation Area of the Congressionally-designated Rogue Wild and Scenic River corridor are allocated to visual resource management Class I (for preservation of the existing character of landscapes).

Private Property

Management actions would be taken to prevent, stop, or reverse any significant damage to private land and improvements resulting from public use.

Public Use and Access

Recreation use including, but not limited to, hiking, fishing, camping, hunting, and boating is encouraged in recreational river areas to the extent consistent with the protection of the river environment. Public use and access may be regulated and distributed, where necessary, to protect and enhance the ORVs. Any new structures must meet established safety, universal access, and health standards, or in their absence, be free of any recognized hazard.

Camping and picnicking opportunities will be provided that range from primitive undeveloped sites to highly developed facilities. There is a 14-day camping limit unless otherwise allocated or posted.

Supplemental Information - Camping is an activity that can have significant physical impacts on the natural environment when allowed outside of developed areas. Additional social impacts can arise when camping occurs on small parcels of public land adjacent to private property. Recreationists can unknowingly trespass on adjacent private lands when an intermixed ownership pattern exists. Trespass in this situation often results in an increased fire danger, accumulated litter, and vandalism to private property. To alleviate some of these problems, areas may be designated as "access only" or "day-use only" (USDI 1978).

Jumping, falling, rappelling, dangling, throwing or causing or assisting any object, person or animal to jump, fall, rappel, dangle or be thrown from Grave Creek Bridge or Hellgate Bridge are prohibited. Occupancy of any portion of the above bridges, other than the roadway or pedestrian footpaths located on these bridges, is prohibited. Bridges are closed to uses other than that for which they are designated (*Federal Register* Vol. 57, No. 110, 24271-24274).

Recreation

The management plan for a river would evaluate current and potential recreational use, and if appropriate, identify a maximum carrying capacity for recreational boating use. The implementation of permit systems, other than permits for commercial use of federal lands and related waters, is typically undertaken only when public use approaches the identified maximum carrying capacity.

Supplemental Information - One of the key reasons for including the Rogue River in the National Wild and Scenic Rivers System was to protect and enhance the recreational values the river

possesses. These values are realized in a great variety of activities. They range from individuals pitting their knowledge and skills against the sometimes hostile forces of nature to recreation uses where the facilities and equipment are so sophisticated that the river can be enjoyed with no special knowledge or skill (USDI 1972).

- Consistent with the objectives of a recreational river classification, sufficient recreation facilities, on both private and federal land, would be developed to meet the needs of the recreationists. Use levels would not be allowed to reach the point where the quality of recreational experience or quality of the stream environment deteriorates.
- Since boating, fishing, and sightseeing are the main recreational uses on the river, top priority for recreation development would be given to improving the quality of these activities.
- Although 1969 levels of all types of boating activity created few problems, uncontrolled future use would probably result in safety hazards and a lowering of the quality of the recreation experience. When the need warrants, this would be prevented by the establishment of regulations limiting size, numbers, type, and speed to provide optimum boat use.
- Future technological advances may result in new types of equipment that could be used on the river. Only such types of equipment compatible with management objectives would be permitted.

Recreation Facilities

Opportunities will be provided for engaging in a wide range of river-oriented recreation activities dependent on or enhanced by the free flowing nature of the river. Developed recreational facilities have a necessary and important role in supporting some of these recreation activities and, therefore, are essential in order to fulfill the objectives for which this area was designated.

Facilities that will accommodate a wide range of recreation activities dependent on the river environment will be located and developed with minimum adverse impact on the river resources.

Safe parking areas will be provided out of view from the river.

Safe access to and along selected segments of public land adjacent to the river with special consideration to seasonal use will be provided.

Except for launching ramps, facilities will not be built immediately adjacent to the river.

Special consideration will be given to develop facilities to accommodate the elderly and the handicapped. Every effort would be made to provide universal access.

Interpretive centers, administrative headquarters, campgrounds, and picnic areas may be established near the river.

Recreational needs and resource capabilities will be identified along with the necessary development of facilities consistent with the intent of the National Wild & Scenic Rivers Act.

Recreation Opportunity Spectrum

Standard recreation opportunity spectrum classes for a river segment with a federal classification of recreational river is normally in the range from natural motorized river to urban river.

Supplemental Information - The following characterizations represent the desired future conditions for the experience opportunities:

- Naturalness - modified natural motorized river.
- Access - modified natural motorized river.
- Remoteness - modified natural motorized river.
- Social Encounters - rural river
- Visitor Management - modified natural motorized river.
- Facilities - modified natural motorized river.

Scenic Easement Program

A scenic easement is the right to control the use of a piece of private land, including the air space above such land, within the authorized boundaries of a component of the wild and scenic river system, for the purpose of protecting the natural qualities of a designated river area. Control shall not affect, without the owner's consent, any regular use exercised prior to the acquisition of the easement. Compliance with this management direction will be accomplished through the acquisition of scenic easements for land remaining in private ownership.

Additional standards are that structures that can be seen from the river will be of an attractive design and have sufficient topographic or vegetative screening to make them as inconspicuous as possible.

Supplemental Information - Scenic easements will be sought to protect the natural environment or setting. Easements will consider protection of the view from the river or its environs as well as protection of critical resources (USDI 1972).

Scenic easements will be written so that improvement or alteration of the property or change in land use that may impair the scenic quality or basic resource will require review and approval before such activity may begin. Conforming and nonconforming uses of land are covered in this plan in a general way. Specific application of these guides will necessarily be determined on a case-by-case basis.

Where a scenic easement for a parcel of private land is needed, an attempt will be made to negotiate an easement for the parcel within the river boundary.

Acquisition of fee title will be considered on any parcel of land that becomes available if it is in the public interest to do so.

While there is a need and the terrain is suitable, an easement for public access along the bank of the river will be acquired.

Fee acquisition will not be considered essential, but may be desirable in some instances.

Scenic easements will recognize the existence of more human-made modifications. Easements will be sought if there is a need to control uses that conflict with the basic resource.

Sound

Sound standards are based on the objectives of the recreational opportunity spectrum class being managed.

Supplemental Information - The key concept for the Hellgate Recreation Area is that sound can be managed at a range of recreation opportunity spectrum levels designed to protect and enhance

existing recreational values. Visitors to the recreation section could experience a broad range of sounds from different sources. The river setting standards (i.e., recreation opportunity spectrum subclasses) range from modified natural motorized river to rural river. For example, the sounds of other visitors on the water could range from the sounds associated with a low to a high number of parties encountered at one time.

Water, shoreline, and roadside sound would be managed whenever and wherever it unreasonably degrades or affects the ORVs for which the river was designated or the quality of the recreation experience.

Sound from motorized travel is permitted on existing roads and would be controlled by management similar to that of the surrounding area. Sound from recreation motorized watercraft on the water would be managed in accordance with existing regulations or restrictions (e.g., Oregon State Marine Board rules for recreational watercraft). Sound from commercial motorized watercraft would be managed by BLM. No person shall operate a commercial motorized tour boat on the waters of the Hellgate Recreation Area that exceed a sound level as follows:

- For engines manufactured before January 1, 1993, a maximum sound level of 90 decibels on the “A” scale when subjected to a stationary test as prescribed by the Society of Automotive Engineers J2005.
- For engines manufactured after January 1, 1993, a maximum sound level of 88 decibels on the “A” scale when subjected to a stationary test as prescribed by Society of Automotive Engineers J2005.

Unreasonable noise is prohibited on all BLM-administered land and water. Considerable weight to opinions expressed by the public will be given to management of sound sources near sound sensitive areas.

Transportation

Existing roads and bridges affect the quality of the landscape along the river (USDI 1972).

Great care will be taken in the location and design of any future roads to assure they are not visible in a way that would detract from the river environment.

Construction of roads, trails, or tramways will be controlled on private land through scenic easements. Approval of construction will be determined on a case-by-case basis.

No additional airstrips or railroads will be permitted.

Helispots may be located only in locations out of view of the river, trail, or recreation sites and where they do not adversely affect the recreation experience.

There will be no additional bridges or cable crossing across the Rogue River.

Public use of the trail system, existing and proposed, will focus on providing hiker opportunities.

Roads and trails will be constructed to the minimum safe standard consistent with the intended use. Public roads will be treated to eliminate dust, when deemed necessary.

New roads needed for developments will be permitted providing the design, location, and standards are such that the least impact on the environment is assured. Additional through roads paralleling the river will not be permitted.

Parking areas will be located out of sight of the river or recreation sites. Screening will be provided if necessary. If there is any other suitable nearby place to park, parking will not be permitted on the gravel bars in view of the river. Where there is no suitable alternative, vehicles will be parked where they are least conspicuous.

Trails within the river corridor would be managed to protect the ORVs. Designated trails would be designed, constructed, maintained, and managed to have minimum effect on other resource values, as well as provide for the safety of the visitor. Trails would be managed to provide access to a variety of recreational opportunities, including fishing, sightseeing, hiking, nature study, and camping.

Universal Access

Universal access provides outdoor recreation opportunities to all visitors irrespective of age or ability. Universal design is a philosophical approach to accessible design that attempts to accommodate the broadest possible spectrum of people through a single, all-encompassing design, rather than the provision of multiple elements specially designed for use only by distinct groups. The integration of universal access design in all outdoor recreation facilities and programs ensures that people of all ages and abilities have access to the widest range of recreation opportunities. The goal is to provide all visitors choices from highly developed to primitive settings while protecting the ORVs.

It is not necessary or desirable to develop all recreation settings equally. As the level of development and modification decreases along the spectrum from urban/rural to primitive, expectations of comfort, security, and accommodation for accessibility are also expected to diminish, while expectations of rusticity, challenge, and risk increase.

Water and Soil

Water and soil are the two basic elements that make a river and its banks. The condition of both is important in that they affect all the other uses and activities in the area. The following management direction is aimed at maintaining or improving the condition of the soil, water, and watershed (USDI 1972).

- Scenic easements on critical soil areas of privately-owned lands have been acquired to protect those areas exhibiting clear and present potential for deterioration if disturbed or where serious deterioration occurs.
- Stabilize or revegetate all areas of exposed soils caused by human activities. Place special emphasis on preventing and controlling soil erosion near the water's edge.
- Alteration of the stream flow and vegetation manipulation will be limited to that necessary to maintain safe navigation and be consistent with laws and regulations imposed by the state of Oregon through the authority of the Oregon Division of State Lands.
- Modification of bedrock will not be permitted.
- Allow no surface dumping of garbage or other potential pollutants. Waste material must be disposed of in a manner that does not contaminate ground or surface water.
- Sewage disposal systems must meet or exceed the State of Oregon and local government sanitation requirements.

Water Rights

In the process of evaluating river segments, authorized officials are held to established principles of law with respect to water rights.

Supplemental Information - Under the provisions of Section 13 of the Act, as well as other statutes, river studies should not interfere with existing rights (except for licenses under Section 7(b) of the Act, pertaining to Section 5(a) river studies including the right of access with respect to the beds of navigable streams, tributaries, or river segments. In addition, under the Federal Land Policy and Management Act and the Federal Power Act, the BLM has conditional authority to control any proposed projects that would be incompatible or potentially degrading to river and/or other identified resource values.

Watchable Wildlife Areas

Protection and maintenance of the primary habitats would be the priority on those areas designated as watchable wildlife sites. Other activities proposed in the watchable wildlife sites would be analyzed to determine compatibility with the priority uses in these areas.

Supplemental Information - There are three existing watchable wildlife areas designated in the Hellgate Recreation Area. These are located at Whitehorse Park, Hog Creek Landing, and Hellgate Canyon Overlook. Whitehorse Park's primary habitat is river riparian and ponds. It was designated as a bird viewing area where visitors can expect to see neotropical migrants, resident birds, raptors, and waterfowl. Hog Creek Landing was designated primarily for rock habitat at the mouth of Hellgate Canyon where viewers can expect to see species associated with rock habitat such as raptors and cliff swallows. The Hog Creek site also offers the viewers riparian and river habitat where they can expect to see waterfowl, shore birds, and river otter. Hellgate Overlook was also designated for the rock habitat and the unique viewing offered by the site on top of the canyon.

Wildlife

Protect wildlife species considered to be threatened or endangered.

Provide the maximum number of wildlife sightings along the river and trails.

Allow natural succession to continue on the majority of the lands along the river that are vegetated with either mixed conifer forest or riparian vegetation.

Convert agricultural vegetation species on acquired lands to species that would provide better habitat for wildlife.

Supplemental Information - The Rogue National Wild and Scenic River Wildlife Management Plan was prepared in 1980 as a result of a decision in the 1978 Hellgate Recreation Area Management Plan. Lands managed by the BLM along the Rogue River from the confluence of the Applegate River to the confluence of Grave Creek were inventoried for habitat type and condition. Data resulting from that inventory were used to develop management strategies for those lands. The majority of the lands along the river were vegetated with either mixed conifer forest or riparian vegetation that changes very slowly through time. Management recommendations for those lands was to monitor them and allow natural succession to continue. Other lands, especially those above Hog Creek, that were purchased to protect the river corridor were home sites and agricultural lands.

Appendix B – Management Guidelines and Standards

Management suggestion for much of these lands was to convert them from agricultural vegetation to vegetation species that would provide better habitat for wildlife. The majority of the projects proposed in the management plan were completed in the early 1980s. Some of these projects include the conversion of a peach orchard to grassland, disking and seeding of old hay fields to grasses better suited for dry habitats, installation of bird boxes, and closure of roads to improve wildlife habitats. After completion of most of the proposed projects, the area has been monitored to determine the condition and trend of the habitats. After the initial plantings, most of the project areas have been allowed to return to more natural processes. Management of roads, recreation areas, and other uses have been and will continue to be consistent with the existing wildlife habitat management plan.

Projects such as the peach orchard and the hay fields near Robertson Bridge have been invaded with blackberries, pine seedlings, hardwoods, and brush species. Although many of the species that have become established in these areas are not native, they do provide a valuable contribution to the habitat components of this riparian habitat area. Species like the Himalayan blackberry, which is a non-native, aggressive invader, has displaced native species of grass, forbs, and shrubs. Blackberries may become a significant problem in the future if they continue to encroach and overtake the open grassland areas. Open grasslands provide habitat for many species of sparrows, small mammals, and reptiles. If the invasion of blackberries continues in these habitats, some type of control may be necessary. Blackberries do, however, provide excellent cover and an abundant food source for many other wildlife species.

Appendix C

County Zoning

The following is a summary of the zoning regulations for the County of Josephine. The regulations are designed to protect the public health, safety, and general welfare of the community. The regulations are based on the following principles:

The following is a summary of the zoning regulations for the County of Josephine. The regulations are designed to protect the public health, safety, and general welfare of the community. The regulations are based on the following principles:

Josephine County Zones

Farm (Exclusive Farm and Farm Reserve Zones)

Land within the Farm Zone is zoned for agricultural use. The purpose of the Farm Zone is to protect the public health, safety, and general welfare of the community. The regulations are based on the following principles:

- The use of land within the Farm Zone is limited to agricultural use.
- The use of land within the Farm Zone is limited to agricultural use.
- The use of land within the Farm Zone is limited to agricultural use.
- The use of land within the Farm Zone is limited to agricultural use.
- The use of land within the Farm Zone is limited to agricultural use.

The purpose of the Farm Zone is to protect the public health, safety, and general welfare of the community. The regulations are based on the following principles:

The purpose of the Farm Zone is to protect the public health, safety, and general welfare of the community. The regulations are based on the following principles:

Forest (Forest Commercial and Forest Reserve Zones)

Land within the Forest Zone is zoned for forest use. The purpose of the Forest Zone is to protect the public health, safety, and general welfare of the community. The regulations are based on the following principles:

Appendix C

County Zoning

The purpose of this appendix is to provide a summary of the County Zoning Ordinance. The Ordinance is designed to regulate the use of land and buildings in the County. It is intended to provide a framework for the development of the County and to ensure that the use of land and buildings is consistent with the County's goals and objectives. The Ordinance is divided into several chapters, each of which deals with a specific aspect of zoning. Chapter 1 deals with the general provisions of the Ordinance, including the purpose and scope of the Ordinance, the definitions of key terms, and the general principles of zoning. Chapter 2 deals with the various types of zoning districts and the rules that apply to each district. Chapter 3 deals with the process for applying for a zoning change and the requirements for such a change. Chapter 4 deals with the enforcement of the Ordinance and the penalties for violations. Chapter 5 deals with the appeals process and the role of the County Board of Appeals. Chapter 6 deals with the relationship between the Ordinance and other laws and regulations. Chapter 7 deals with the future of the Ordinance and the process for its revision.

The County Zoning Ordinance is a comprehensive set of rules that govern the use of land and buildings in the County. It is designed to provide a framework for the development of the County and to ensure that the use of land and buildings is consistent with the County's goals and objectives. The Ordinance is divided into several chapters, each of which deals with a specific aspect of zoning. Chapter 1 deals with the general provisions of the Ordinance, including the purpose and scope of the Ordinance, the definitions of key terms, and the general principles of zoning. Chapter 2 deals with the various types of zoning districts and the rules that apply to each district. Chapter 3 deals with the process for applying for a zoning change and the requirements for such a change. Chapter 4 deals with the enforcement of the Ordinance and the penalties for violations. Chapter 5 deals with the appeals process and the role of the County Board of Appeals. Chapter 6 deals with the relationship between the Ordinance and other laws and regulations. Chapter 7 deals with the future of the Ordinance and the process for its revision.

Zoning is a reflection of Josephine County's comprehensive plan. The county has zoning that allows residences as a permitted use on private nonresource lands (rural residential) and zoning that allows residences as a conditional use on private resource lands (farm zones, forest commercial, woodlot resource). Residences as conditional uses must be compatible with, and not interfere with, activities on resource lands. The effects analysis assumes that these resource activities and land uses would continue on private lands adjacent to the Hellgate Recreation Area.

The following is generalized for the Hellgate Recreation Area and nearby areas outside the recreation area.

Josephine County Zones

Farm (Exclusive Farm and Farm Resource Zones)

Land within the farm zones is regulated under statewide planning Goal 3, which protects agriculture in Oregon. The uses allowed in the farm zones are set by Oregon Revised Statutes (ORS), Chapter 215 and Oregon Administrative Rules (OAR), Chapter 660, Division 33. Josephine County is mandated to implement state laws and does not have the authority to deviate from them. The purpose of the zones is to protect the land for resource use. The primary uses in the zones are farming and forestry. Residential uses may be allowed under certain circumstances as may other nonfarm uses. All nonfarm uses must meet the following criteria:

- The use will not force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use.
- The use will not significantly increase the cost of accepted farm or forest practices on surrounding lands devoted to farm or forest use.
- In addition, a written statement will be recorded with the deed which recognizes both the rights of adjacent and nearby land owners to conduct farm operations and that agricultural and forest uses for lands zoned for resource use have priority over all land uses.

The minimum lot size in both zones is 80 acres, though smaller lots may be approved in conjunction with an approval for a nonfarm use. Farming practices may be restricted within the corridor to the extent that they would disturb riparian vegetation along the river. The scenic easements may control how farming is conducted.

The land from Griffin Park to Grave Creek has little viable farm land with the majority being woodlots or forest commercial in character. The stretch from the confluence of the Applegate and Rogue rivers to Griffin Park has some pockets of intensive and productive farm land.

Forest (Forest Commercial and Woodlot Resource Zones)

Land within the forest zones is regulated under statewide planning Goal 4, which protects forestry in Oregon. The uses allowed in the forest zones are set by ORS, Chapter 215 and OAR, Chapter 660, Division 6. Josephine County is mandated to implement state laws and does not have the authority to deviate from them. The purpose of the zones is to protect the land for resource use. The primary uses in the zones are farming and forestry. Residential uses may be allowed under certain circumstances, as may other nonforest uses. All nonforest uses must meet the following criteria:

- The proposed use will not significantly increase fire hazard or significantly increase fire suppression costs or significantly increase risks to fire suppression personnel.
- The use will not significantly increase the cost of accepted farm or forest practices on surrounding lands devoted to farm or forest use.
- The use will not force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use.
- In addition, a written statement will be recorded with the deed which recognizes both the rights of adjacent and nearby land owners to conduct forest operations consistent with the Forest Practices Act and that agricultural and forest uses on lands zoned for resource use have priority over all other land uses.

The minimum lot size in both zones is 80 acres, though smaller lots may be approved in conjunction with an approval for a nonforest use. Some of the uses specifically allowed in both zones may be restricted under the scenic easement program. The BLM restricts the right to conduct forest practices and manages the corridor consistent with the principals of the National Wild and Scenic River designation.

The BLM administers 5,414 acres of land in the Hellgate Recreation Area. Two-thousand two-hundred and twenty (2,220) acres, or 41 percent, of this public ownership is classified as land suitable for timber production. Fifty-nine percent, or 3,194 acres, is classified as unsuitable (poor soils, too rocky, or nonforest). All timberland, both suitable and unsuitable, is allocated to wild and scenic river use.

Rural Residential

Land within the rural residential zone is land that is not considered farm or forest land. Land is placed in this zone because an exception to Goals 3 and 4 for residential purposes has been made by the Land Conservation and Development Commission (LCDC). The primary use of the zone is for homes. There are three density standards: RR-1, rural residential zone with a 1 acre minimum lot size; RR-2.5, rural residential zone with a 2.5 acre minimum lot size; and RR-5, rural residential zone with a 5 acre minimum lot size. Uses that compliment the residential nature of the zone are allowed, including home-based businesses, kennels, play grounds, recreational facilities, churches, and schools. Some other uses may be allowed, subject to approval criteria, including landfills, a water reservoir, mining, and processing of aggregate. Multiple dwellings on a single lot are not allowed. All of the uses allowed within this zone are subject to the restrictions in any applicable scenic easement.

Tourist Commercial

Four areas are zoned for tourist commercial: Galice Store and Resort, OK Corral, Morrison's Lodge, and Rogue Glen Lodge.

The purpose of this zone is to allow the development of services intended to aid the traveling public. It is a zone that encourages tourist-oriented facilities, including lodging, food service, retail shops, and recreational facilities. Dwellings are allowed in conjunction with a commercial use. Land placed in this zone is land not considered farm or forest land. Land is placed in this zone because an exception to Goals 3 and 4 for commercial uses has been made by the Land Conservation and Development Commission (LCDC).

Wild and Scenic River

The wild and scenic river overlay is a zone that is placed on a lot or parcel of land in addition to existing zoning. It supplements or adds additional restrictions based on a particular characteristic. The overlay zone does not replace and cannot override any restrictions placed on a parcel by the underlying zoning or the scenic easements the BLM holds. The content of the overlay is essentially the same as was developed when Josephine County's comprehensive plan was acknowledged by LCDC in 1985. It requires notice and approval by the BLM of any proposed land use before Josephine County can issue the development permit necessary to begin construction.

Goal 5 Resources

Goal 5 is a statewide planning goal designed to protect open spaces, scenic and historic areas, and natural resources. Goal 5 requires local governments to identify potential resources, determine if a resource site is significant or important and, if so, protect the resource. Twelve resources are currently protected under Goal 5:

- Land needed or desirable for open space.
- Mineral and aggregate resources.
- Energy sources.
- Fish and wildlife areas and habitat.
- Ecologically and scientifically significant natural areas.
- Outstanding scenic views and sites.
- Water areas, wetlands, watersheds, and groundwater resources.
- Wilderness areas.
- Historic areas, sites, structures, and objects.
- Cultural areas.
- Potential and approved Oregon recreational trails.
- Potential and approved federal wild and scenic waterways and state scenic waterways.

Josephine County has a fairly complete inventory of significant Goal 5 resources in the planning area. Potential Goal 5 resources were identified. Josephine County may complete the Goal 5 process on these sites. Since the sites are on federal land or located on land controlled by BLM scenic easements, the protection of the sites by Josephine County will be deferred to BLM.

Utilities

The placement of utilities in the Hellgate Recreation Area is governed by three primary factors: the actual carrying capacity of the land for sewage disposal and groundwater availability, restrictions by BLM scenic easements, and land use regulations.

Electricity is available along the river corridor. Existing developments are served by wells for groundwater and septic systems for sewage treatment. New residential development requires at least one acre for installing a septic system and drilling a well. Septic system installation is regulated by the Oregon Department of Environmental Quality and well drilling is regulated by the County Watermaster and Article 84 of the Rural Land Development Code. Installation of a community water or sewer system may require an exception to statewide planning goals 11 and 14. This is a difficult process that serves to deter construction of community systems unless there is a public health hazard, which must be abated.

Rural Residential and Tourist Commercial

Josephine County rural residential and tourist commercial zones and the State of Oregon's river community classification are analyzed and mapped by six river segments that generally reflect the Hellgate Recreation Area as broken up by boat ramps.

Whitehorse Park to Matson Park

The river segment from Whitehorse Park to Matson Park has no tourist commercial or rural residential zoning, or river communities within the Hellgate Recreation Area. There are a few areas zoned rural residential located outside the Hellgate Recreation Area corridor boundaries. The area is primarily zoned for farming and is mostly in private ownership. The stretch from the confluence of the Applegate and the Rogue to Griffin Park has some pockets of intensive and productive farm land. There are some major riparian buffers (cottonwoods and willows) between the view visitors have from the river and agricultural activities.

Matson Park to Robertson Bridge

The river segment from Matson Park to Robertson Bridge has an extensive amount of land zoned rural residential both within the Hellgate Recreation Area and adjacent to it. Three of the seven river communities are located there (Peaceful Valley Acres Subdivision, Ferry Park Estates, and Burnette Estates Subdivision). Two additional river communities (Rogue Riffle Subdivision and Cathcart) are located north of Robertson Bridge. The land from Griffin Park to Grave Creek has little viable farm land with the majority being woodlots or forest. The majority of the land is in private ownership.

Robertson Bridge to Hog Creek

The river segment from Robertson Bridge to Hog Creek has an extensive amount of land zoned rural residential both within the Hellgate Recreation Area and adjacent to it. Three of the six river communities are located there (Rogue Riffle Subdivision, Cathcart, and Green Tree Subdivision). A tourist commercial zone is found at the OK Corral. In addition, two parcels of land (OK Corral and Double Tree Ranch) have BLM scenic easements that allow docks and commercial use. The majority of the land is in private ownership.

Hog Creek to Ennis Riffle

The river segment from Hog Creek to Ennis Riffle has one small area identified for rural residential use within the corridor near Hog Creek and some more acreage zoned rural residential adjacent and to the east. There are no areas classified as river communities. The Morrison's Lodge area is zoned for tourist commercial. Morrison's Lodge also has a BLM scenic easement that could allow an increase in commercial activity. The vast majority of the land in this stretch is managed by Josephine County or the BLM.

Ennis Riffle to Rand

The river segment from Ennis Riffle to Rand has two areas zoned for tourist commercial (Rogue Glen Lodge and Galice Store and Resort). One small rural residential zone is identified around the Rogue Glen Lodge.

The Galice Subdivision is the last river community identified by the Oregon State Parks and Recreation Department. This river community and rural residential area has a substantial amount of commercial activity that occurs in the form of home-based businesses (outfitter and guiding

services, shuttle services, raft and equipment rentals). The vast majority of land in this river segment is in local, state, or federal administration.

Rand to Grave Creek

The river segment from Rand to Grave Creek has no land zoned tourist commercial, rural residential, or classified as a river community. Almost all the land is under local or federal administration.

People/Residences

People and residences correlate with the Josephine County zone for rural residential and the State of Oregon's river community classification.

An assumption is that the number of residences or potential residences near BLM-administered wild and scenic rivers can be used as a measure of the degree of potential conflict between residents and river users. Low density populations are less likely than high density populations to object to river use activities. It was further assumed that lands zoned farm, forest, and woodlot do not generally support the population density associated with conflicts over nearby visitor use. These zones generally have minimum sizes of greater than 20 acres for new parcels.

An analysis conducted by the BLM in the late 1970s concluded that as a result of scenic easement and fee acquisitions, the objectives of the Wild and Scenic Rivers Act and the housing densities for the recreational area described in the 1972 joint management plan were met (USDI 1972). The analysis was limited to housing densities per river mile within the corridor boundaries of the Hellgate Recreation Area (see Table 3-15). Not surprisingly, residence occurrence corresponds with private ownership, residential zoning, and river community classifications.

Housing densities continue to increase in the areas zoned rural residential and river community.

NOTE: Our effects analysis assumes that these resource activities and land uses will continue on private lands adjacent to the Hellgate Recreation Area.

Appendix D

Monitoring

Monitoring is the process of collecting, analyzing, and reporting information about a project's progress, performance, and risks. It is a key component of project management that helps managers to identify and address issues early, ensuring that the project stays on track and meets its objectives.

Monitoring involves a variety of activities, including tracking project progress, managing risks, and communicating with stakeholders. It is a continuous process that requires regular updates and reporting. Effective monitoring helps managers to make informed decisions and adjust the project plan as needed to ensure successful completion.

Types of Monitoring

Implementation Monitoring

Implementation monitoring focuses on ensuring that the project is executed according to the plan. It involves tracking the progress of tasks, managing resources, and identifying any deviations from the schedule or budget. This type of monitoring is essential for keeping the project on track and ensuring that all deliverables are completed on time.

Efficiency Monitoring

Efficiency monitoring is concerned with optimizing the project's performance. It involves tracking the project's progress and identifying areas where resources can be used more effectively. This type of monitoring helps managers to identify inefficiencies and make adjustments to improve the project's overall efficiency and reduce costs.

Validation Monitoring

Validation monitoring is focused on ensuring that the project's deliverables meet the required quality standards. It involves tracking the project's progress and identifying any issues that may affect the quality of the deliverables. This type of monitoring helps managers to identify and address quality issues early, ensuring that the project meets the required standards and customer expectations.

Baseline Monitoring

Baseline monitoring is used to track the project's progress against a baseline. It involves tracking the project's progress and identifying any deviations from the baseline. This type of monitoring helps managers to identify and address deviations early, ensuring that the project stays on track and meets its objectives.

Adaptive Management

Adaptive management is a process that allows managers to adjust the project plan as needed based on the information gathered through monitoring. It involves tracking the project's progress and identifying any issues that may require a change in the project plan. This type of management helps managers to respond quickly to changes and ensure that the project stays on track and meets its objectives.

Monitoring

Monitoring is the process of tracking the implementation of a land use plan. The purposes of monitoring are to: ensure activities are occurring in conformance with the plan, determine if activities are producing the expected results, and determine if activities are causing the effects identified in the RAMP/FEIS.

River activities and conditions (resource and social) would be monitored to provide data for use in evaluating the effect of management activities upon the environment in the corridor. Evaluations would measure compliance in achieving the goals and objectives of the Hellgate Recreation Area Management Plan, the protection and enhancement of the outstandingly remarkable values of the river corridor, and the ability to achieve and maintain the standards, guidelines, and desired future conditions.

Types of Monitoring

Implementation Monitoring

The most basic type of monitoring. Implementation monitoring determines whether the goals are being implemented and whether the standards and guidelines are being followed. Does the project and/or activity follow the direction in its management plan?

Effectiveness Monitoring

Effectiveness monitoring is aimed at determining if the implementation of activities has achieved the desired goals, and whether the objectives of the standards and guidelines were met. Success may be measured against the benchmark of desired future condition. Cause and effect relationships will ultimately need to be understood to ensure management actions result in desired conditions.

Validation Monitoring

Validation monitoring is intended to ascertain if a cause and effect relationship exists between management activities and the resources being managed. It confirms whether the predicted results occurred and if assumptions and models used in developing the plan are correct. Are the underlying management assumptions correct?

Baseline Monitoring

Baseline monitoring is used to establish reference conditions by monitoring elements or processes that may be affected by management activities.

Adaptive Management

Adaptive management is a process of action-based planning, monitoring, researching, evaluating, and adjusting with the objective of improving implementation and achieving the goals of the standards and objectives. Adaptive management is a continuing process of monitoring and evaluation to adjust management strategies to meet the goals and objectives of ecosystem management. Monitoring plays a vital role in adaptive management by detecting changes so management activities can be modified to achieve management objectives.

Inventories are parts of the adaptive management framework and need to be linked with monitoring. Information gathered in the inventory and survey process form a baseline from which trends in ecosystem and social conditions can be measured.

The evaluation process reviews the plan and monitoring data to see if the management goals and objectives are being met and if management direction is sound. This portion of the adaptive approach examines the monitoring data gathered over time and uses it to draw conclusions on whether management actions are meeting objectives, and if not, why. The conclusions are used to make recommendations on whether to continue current management or what changes need to be made in management practices to meet the objectives. The results could be changes in mitigating measures, future actions, monitoring elements, objectives, standards, guidelines, or a variety of these.

Resource Monitoring

Soils

Goal

- To assess human-caused erosion, bank loss, and sedimentation, and to identify potential future bank degradation and natural/property loss.

Objectives

- To survey changes in stream bank conditions due to erosion. Surveys will be conducted at specified sites using photographic comparisons.
- To initiate mitigation measures, as needed.

Assumption

- Bank erosion is primarily a natural process (Klingeman 1993).

Monitoring Plan

Purpose of Monitoring - Determine if human activities are causing bank erosion and the extent.

Unit of Measure - Observation and photographic year-to-year comparison.

Threshold - Local river bank loss is substantial. "Substantial" is a relative term and will be determined upon establishment of monitoring trends for each site.

Frequency of Monitoring - Photo points and standard notes at each site annually.

Estimated Annual Cost - \$2,000.

Management Responsibility - Soil Scientist and River Program.

Water Quality

Goal

- To be involved and active in the planning process for the Department of Environmental Quality's Water Quality Management Plan. The Water Quality Management Plan will identify water quality problems and result in problem mitigation. It will also establish if there are impacts from recreation on water quality.

Objective

- Provide preliminary and supplemental data in the form of *E. coli* sampling and testing for DEQ's Water Quality Management Plan in order to assist in reducing disease-causing organisms in the Rogue River.

Monitoring Plan

Purpose of Monitoring - Determine if recreation activities are negatively impacting water quality.

Unit of Measure - Number of *E. coli* per 100 milliliters. Sampling and testing for *E. coli* will be consistent with DEQ protocol. Samples will be taken at three locations relative to the HRA: above, below, and in the central part of the HRA. Testing will be coordinated with the DEQ's testing program.

Threshold - Monthly average of 126 *E. coli* per 100 milliliters or 406 per sample.

Frequency - Testing will begin the summer of 2003. Further testing will occur every three years, or as needed.

Estimated Annual Cost - \$3,000.

Management Responsibility - Soil Scientist and River Program.

Riparian Areas, Wetlands, and Flood Plains

Goal

- Maintain or enhance existing desired natural conditions in riparian areas, wetlands, and flood plains. "Desired natural conditions" refers to existing conditions or conditions that are at less than excess disturbance.

Objectives

- Establish a baseline of existing conditions for the purpose of future comparison. If existing ground disturbance is at excess levels (15 to 25 percent of any given site), actions would be initiated to reduce disturbance levels.
- Maintain desired natural conditions by monitoring the same sites annually to establish trends of disturbance. Where trends show net increases, implement actions that would reduce disturbed areas.

Assumptions

- Most ground-based recreation activity takes place adjacent to the river. Some wetlands may be separate and isolated from riparian areas and flood plains.
- Recreation activity can cause ground disturbance that will affect soil productivity and may result in erosion.
- Ground disturbance consists of human- or domestic animal-caused changes in the soil surface including: deflection, mechanical soil or organic matter displacement, and artificial surfacing gravel or pavement. Monitoring of ground disturbances is limited to areas that are not affected by peak river flows.
- Excess disturbance is considered at high levels where areal extent of disturbance is roughly in the range of 15 to 25 percent of any given site. This quantity is subject to adjustment, depending on finding of existing condition.

Monitoring Plan

Purpose of Monitoring - Determine if human-caused activities cause major impacts to these areas.

Unit of Measure - Percent of disturbed area.

Threshold - Increase in disturbance.

Frequency of Monitoring - Annually.

Estimated Annual Cost - \$2,000.

Management Responsibility - Soils Scientist and River Program.

Botany

Goal

- Maintain or enhance native vegetation in as natural state as possible within the Hellgate Recreation Area.

Objectives

- Maintain native vegetation at current levels of coverage. A decrease of 20 percent cover at a specific site due to trampling, vehicle use, or noxious weed spread, for example, will initiate management actions.
- Establish a baseline of existing noxious weed conditions.
- Decrease the current coverage of specific noxious weed populations by 20 percent annually, when and where eradication treatment efforts have a possibility of success.
- Eradicate newly discovered weed invasions in disturbed areas annually.

Monitoring Plan

Purpose of Monitoring - Determine if public activities will reduce the extent of native vegetation.

Unit of Measure - Percent of area disturbed and extent of noxious weeds.

Threshold - Decreased cover of native vegetation. Increased cover of noxious weeds.

Frequency of Monitoring - Photo monitoring annually. Transects or perimeter mapping every other year.

Estimated Annual Cost - \$2,000 for monitoring. \$2,000 for weed treatments.

Management Responsibility - Botanist, River Program, and possibly Oregon Department of Agriculture.

Fisheries

Goals

- To support the BLM's special status species policy regarding fall chinook.
- To manage fall chinook spawning, associated spawning behavior, and fry rearing.
- To protect the fall chinook population from harassment during spawning activity and to prevent mortality to one egg or fry in the redds.

Objectives

Annually conduct three monitoring trips to document adult spawning activity for apparent spawning behavior, actual spawning, and redds by floating and/or bank observations.

- Document location, time, and date of survey;
- Determine if adverse effects are present;
- Determine the level of unacceptable impacts to fall chinook;
- Document unacceptable adverse effects; and
- Notify Field Manager and River Manager in writing of the type and location of adverse effects, and recommendations for mitigation, if needed.

Assumptions

- Fall chinook redds are found in riffles where boating activity occurs;
- Fall chinook salmon spawning, courtship displays, redd building, and fertilization are considered sensitive to disturbance from boats passing over or near these areas;
- Motorized boating, and boat and bank angling have a high probability for disturbance to eggs and spawning behavior; and
- Float craft with kickers (outboard motors) may disturb chinook spawning or eggs in the gravel.

Monitoring Plan

Purpose - To determine the extent of harm or harassment to spawners, redds, or eggs.

Unit of Measure - Presence of spawning behavior, **or** actual spawning pairs, **or** number of redds.

Threshold - Stop human activity when unacceptable impacts are identified. Activities producing adverse effects would be allowed a 3-day grace period of operation before the affecting activity would cease.

Frequency - Annually conduct two monitoring trips in September and one in October.

Estimated Annual Cost - 0.1 work month.

Management Responsibility - Fisheries and River Program.

Wildlife - Bald Eagles

Goal

- To ensure recreation activities in the Hellgate Recreation Area do not impact the reproductive success of known bald eagle pairs.

Objectives

- Annually record the number of young fledged in the Hellgate Recreation Area to determine reproductive success.
- Identify recreation impacts potentially affecting reproductive success of known bald eagle pairs.

Monitoring Plan

Purpose of Monitoring - Determine reproductive success.

Unit of Measure - Number of young fledged.

Threshold - Annual average of 1 fledged per pair with average success of greater than 65 percent over a 5-year period.

Frequency of Monitoring - Annually.

Estimated Annual Cost - \$2,000.

Management Responsibility - Wildlife Staff.

Wildlife - Osprey

Goal

- To ensure recreation activities in the Hellgate Recreation Area do not impact the number of active osprey nests.

Objectives

- Record the number of active osprey nests within the Hellgate Recreation Area and determine trends for number of active nests.
- Identify recreation impacts potentially affecting the nesting activity of osprey in the Hellgate Recreation Area.

Monitoring Plan

Purpose of Monitoring - Document the number of active osprey nests.

Unit of Measure - Number of active nests.

Threshold - Greater than 20 percent reduction in the number of active nests over a 10-year period.

Frequency of Monitoring - Every 3-5 years.

Estimated Annual Cost - \$3,000.

Management Responsibility - Wildlife Staff.

Wildlife - Great Blue Herons

Goal

- To ensure recreation activities in the Hellgate Recreation Area do not impact the number of active great blue heron nests.

Objectives

- Document the location of rookeries and count the number of active great blue heron nests in the Hellgate Recreation Area, and determine trends for number of active nests.
- Identify recreation impacts potentially affecting the nesting activity of great blue herons in the Hellgate Recreation Area.

Monitoring Plan

Purpose of Monitoring - Document the location of rookeries and determine the number of active great blue heron nests.

Unit of Measure - Number of active nests.

Threshold - 20 percent reduction in the number of active great blue heron nests over a 10-year period.

Frequency of Monitoring - Every 3-5 years.

Estimated Annual Cost - \$3,000.

Management Responsibility - Wildlife Staff.

Wildlife - Western Pond Turtles

Goal

- To manage recreation activities in the Hellgate Recreation Area in a manner compatible with western pond turtles.

Objectives

- Obtain an estimate of the western pond turtle population.
- Determine trends for the western pond turtle population within the Hellgate Recreation Area.

Monitoring Plan

Purpose of Monitoring - Obtain an estimate of the western pond turtle population in the Hellgate Recreation Area.

Unit of Measure - Number of western pond turtles.

Threshold - 20 percent reduction in the number of western pond turtles over a 10-year period.

Frequency of Monitoring - Every 3-5 years.

Estimated Annual Cost - \$20,000.

Management Responsibility - Wildlife Staff.

User Perceptions

Goal

- To assess user perceptions on social and ecological impacts, environmental conditions, and user preferences on potential management actions as compared to data gathered in the baseline study done in 1993 (Shindler and Shelby 1993).

Objectives

- Compile demographic data on the user population.
- Identify user perceptions of existing opportunities, conditions, and problems.
- Assess user support for a range of management actions for improving river conditions.

Monitoring Plan

Purpose of Monitoring - Determine if user perceptions change over time while maintaining and enhancing the outstandingly remarkable values of natural scenery, recreation, and fish while providing quality recreation experiences through management actions.

Unit of Measure - User survey results.

Threshold - A 10 percent increase in any survey parameter that directly relates to a decline in providing a quality recreation experience (i.e., resource/ecological conditions, crowding, conflicts, safety, satisfaction, etc.).

Frequency of Monitoring - Every 3-5 years.

Estimated Annual Cost - \$40,000.

Management Responsibility - River Program.

Visitor Use

Goal

- To estimate the number of recreational users within the HRA, utilizing different sampling methods, for the purpose of developing management actions to address concerns associated with the social and ecological impacts assessed in the User Perception surveys).

Objective

- To count visitors participating in private and commercial float/boating activities and primary shoreline activities including day-use, camping, hiking, etc.

Monitoring Plan

Purpose of Monitoring - Record the total number of visitors to the HRA within any calendar year, and to determine activity trends based on an increase and/or decrease in visitors participating in any specific activity.

Unit of Measure - Visitor use day.

Threshold - An increase in any user activity that triggers unacceptable social and/or ecological impacts.

Frequency of Monitoring - Every 2 years.

Estimated Annual Cost - \$10,000.

Management Responsibility - River Program.

Landowners' Perceptions

Goal

- Periodically sample landowners' perceptions to augment and update data gathered in the baseline study done in 1994 (York et al. 1994).

Objectives

- Evaluate the 1994 study for determination of any new parameters needed, including, but not limited to, perceptions of special boating events.
- Determine what trends are developing in landowners' perceptions regarding the same evaluation criteria from the baseline study.

Assumptions

- Landowners' perceptions to the parameters in the study will change over time, or may change over time.

Monitoring Plan

Purpose of Monitoring - Determine if landowners' perceptions are changing.

Unit of Measure - Landowner survey results.

Threshold - Downward trend in landowner satisfaction.

Frequency of Monitoring - Every 3-5 years.

Estimated Annual Cost - \$3,000.

Management Responsibility - River Program.

Transportation

Goal

- To provide a safe and efficient transportation system for those participating in HRA activities.

Objectives

- Establish a consistent baseline for vehicle traffic on the Merlin-Galice Road by measuring traffic counts.
- Compare actual traffic counts to projected traffic counts.

Assumptions

- The majority of traffic occurs during a 10-hour period each day.

Monitoring Plan

Purpose of Monitoring - Determine traffic counts and compare to maximum road capacity.

Unit of Measure - Vehicles per Hour (vph).

Threshold - 2,094 vph.

Frequency of Monitoring - Every 3-5 years.

Estimated Cost - \$2,000.

Management Responsibility - Engineering Staff and River Program.

Appendix E

Wild and Scenic Rivers Act of 1968

Management Responsibility - BLM/BLM

Transportation

Trail

To provide a trail and official designations system for those participating in BLM activities.

Trailhead

To provide a trailhead system for those participating in BLM activities.

To provide a trailhead system for those participating in BLM activities.

Trailhead

To provide a trailhead system for those participating in BLM activities.

Trailhead

To provide a trailhead system for those participating in BLM activities.

To provide a trailhead system for those participating in BLM activities.

Trailhead

To provide a trailhead system for those participating in BLM activities.

Trailhead

To provide a trailhead system for those participating in BLM activities.

Wild and Scenic Rivers Act

(P.L. 90-542, as amended)(16 U.S.C. 1271-1287)

¹An Act to provide for a National Wild and Scenic Rivers System, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, that,

(a) this Act may be cited as the “Wild and Scenic Rivers Act.”

Congressional declaration of policy.

(b) It is hereby declared to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations. The Congress declares that the established national policy of dam and other construction at appropriate sections of the rivers of the United States needs to be complemented by a policy that would preserve other selected rivers or sections thereof in their free-flowing condition to protect the water quality of such rivers and to fulfill other vital national conservation purposes.

Congressional declaration of purpose.

(c) The purpose of this Act is to implement this policy by instituting a national wild and scenic rivers system, by designating the initial components of that system, and by prescribing the methods by which and standards according to which additional components may be added to the system from time to time.

Composition of system; requirements for State-administered components.

Section 2.

(a) The national wild and scenic rivers system shall comprise rivers (i) that are authorized for inclusion therein by Act of Congress, or (ii) that are designated as wild, scenic or recreational rivers by or pursuant to an act of the legislature of the State or States through which they flow, that are to be permanently administered as wild, scenic or recreational rivers by an agency or political subdivision of the State or States concerned, that are found by the Secretary of the Interior, upon application of the Governor of the State or the Governors of the States concerned, or a person or persons thereunto duly appointed by him or them, to meet the criteria established in this Act and such criteria supplementary thereto as he may prescribe, and that are approved by him for inclusion in the system, including, upon application of the Governor of the State concerned, the Allagash Wilderness Waterway, Maine; that segment of the Wolf River, Wisconsin, which flows through Langlade County; and that segment of the New River in North Carolina extending from its confluence with Dog Creek downstream approximately 26.5 miles to the Virginia State line. Upon receipt of an application under clause (ii) of this subsection, the Secretary shall notify the Federal Energy Regulatory Commission and publish such application in the *Federal Register*. Each river designated under clause (ii) shall be administered by the State or political subdivision thereof without expense to the United States other than for administration and management of federally owned lands. For purposes of the preceding sentence, amounts made available to any State or political subdivision under the Land and Water Conservation [Fund] Act of 1965 or any other provision of law shall not be treated as an expense to the United States. Nothing in this subsection shall be construed to provide for the transfer to, or administration by, a State or local authority of any federally owned lands which are within the boundaries of any river included within the system under clause (ii).

Classification.

(b) A wild, scenic or recreational river area eligible to be included in the system is a free-flowing stream and the related adjacent land area that possesses one or more of the values referred to in Section 1, subsection (b) of this Act. Every wild, scenic or recreational river in its free-flowing condition; or upon restoration to this condition, shall be considered eligible for inclusion in the national wild and scenic rivers system and, if included, shall be classified, designated, and administered as one of the following:

(1) *Wild river areas* – Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

(2) *Scenic river areas* – Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

(3) *Recreational river areas* – Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

Congressionally designated components.

Section 3.

(a) The following rivers and the land adjacent thereto are hereby designated as components of the national wild and scenic rivers system:

(1) **Clearwater, Middle Fork, Idaho.**

(2) **Eleven Point, Missouri.**

(3) **Feather, California.**

(4) **Rio Grande, New Mexico.**

(5) **Rogue, Oregon.** – The segment of the river extending from the mouth of the Applegate River downstream to the Lobster Creek Bridge; to be administered by agencies of the Departments of the Interior or Agriculture as agreed upon by the Secretaries of said Departments or as directed by the President.

(6) **Saint Croix, Minnesota and Wisconsin, et al.**

Establishment of boundaries; classification.

(b) The agency charged with the administration of each component of the national wild and scenic rivers system designated by subsection (a) of this section shall, within one year from the date of designation of such component under subsection (a) (except where a different date if [is] provided in subsection (a)), establish detailed boundaries therefor (which boundaries shall include an average of not more than 320 acres of land per mile measured from the ordinary high water mark on both sides of the river); and determine which of the classes outlined in section 2, subsection (b), of this Act best fit the river or its various segments. Notice of the availability of the boundaries and classification, and of subsequent boundary amendments shall be published in the *Federal Register* and shall not become effective until ninety days after they have been forwarded to the President of the Senate and the Speaker of the House of Representatives.

Public availability of maps and descriptions.

(c) Maps of all boundaries and descriptions of the classifications of designated river segments, and subsequent amendments to such boundaries, shall be available for public inspection in the offices of the administering agency in the District of Columbia and in locations convenient to the designated river.

Review requirements for early designations and management plans.

(d)(1) For rivers designated on or after January 1, 1986, the Federal agency charged with the administration of each component of the National Wild and Scenic Rivers System shall prepare a comprehensive management plan for such river segment to provide for the protection of the river values. The plan shall address resource protection,

development of lands and facilities, user capacities, and other management practices necessary or desirable to achieve the purposes of this Act. The plan shall be coordinated with and may be incorporated into resource management planning for affected adjacent Federal lands. The plan shall be prepared, after consultation with State and local governments and the interested public within 3 full fiscal years after the date of designation. Notice of the completion and availability of such plans shall be published in the *Federal Register*.

(2) For rivers designated before January 1, 1986, all boundaries, classifications, and plans shall be reviewed for conformity within the requirements of this subsection within 10 years through regular agency planning processes.

Requirements for study reports.

Section 4.

(a) The Secretary of the Interior or, where national forest lands are involved, the Secretary of Agriculture or, in appropriate cases, the two Secretaries jointly shall study and submit to the President reports on the suitability or nonsuitability for addition to the national wild and scenic rivers system of rivers which are designated herein or hereafter by the Congress as potential additions to such system. The President shall report to the Congress his recommendations and proposals with respect to the designation of each such river or section thereof under this Act. Such studies shall be completed and such reports shall be made to the Congress with respect to all rivers named in subparagraphs 5(a) (1) through (27) of this Act no later than October 2, 1978. In conducting these studies the Secretary of the Interior and the Secretary of Agriculture shall give priority to those rivers (i) with respect to which there is the greatest likelihood of developments which, if undertaken, would render the rivers unsuitable for inclusion in the national wild and scenic rivers system, and (ii) which possess the greatest proportion of private lands within their areas. Every such study and plan shall be coordinated with any water resources planning involving the same river which is being conducted pursuant to the Water Resources Planning Act (79 Stat. 244; 42 U.S.C. 1962 et seq.). Each report, including maps and illustrations, shall show among other things the area included within the report; the characteristics which do or do not make the area a worthy addition to the system; the current status of land ownership and use in the area; the reasonably foreseeable potential uses of the land and water which would be enhanced, foreclosed, or curtailed if the area were included in the national wild and scenic rivers system; the Federal agency (which in the case of a river which is wholly or substantially within a national forest, shall be the Department of Agriculture) by which it is proposed the area, should it be added to the system, be administered; the extent to which it is proposed that such administration, including the costs thereof, be shared by State and local agencies; and the estimated cost to the United States of acquiring necessary lands and interests in land and of administering the area, should it be added to the system. Each such report shall be printed as a Senate or House document.

(b) Before submitting any such report to the President and the Congress, copies of the proposed report shall, unless it was prepared jointly by the Secretary of the Interior and the Secretary of Agriculture, be submitted by the Secretary of the Interior to the Secretary of Agriculture or by the Secretary of Agriculture to the Secretary of the Interior, as the case may be, and to the Secretary of the Army, the Secretary of Energy, the head of any other affected Federal department or agency and, unless the lands proposed to be included in the area are already owned by the United States or have already been authorized for acquisition by Act of Congress, the Governor of the State or States in which they are located or an officer designated by the Governor to receive the same. Any recommendations or comments on the proposal which the said officials furnish the Secretary or Secretaries who prepared the report within ninety days of the date on which the report is submitted to them, together with the Secretary's or Secretaries' comments thereon, shall be included with the transmittal to the President and the Congress.

Review requirements for State components.

(c) Before approving or disapproving for inclusion in the national wild and scenic rivers system any river designated as a wild, scenic or recreational river by or pursuant to an act of the State legislature, the Secretary of the Interior shall submit the proposal to the Secretary of Agriculture, the Secretary of the Army, the Secretary of Energy, and the head of any other affected Federal department or agency and shall evaluate and give due weight to

any recommendations or comments which the said officials furnish him within ninety days of the date on which it is submitted to them. If he approves the proposed inclusion, he shall publish notice thereof in the *Federal Register*.

Study boundaries.

(d) The boundaries of any river proposed in section 5(a) of this Act for potential addition to the National Wild and Scenic Rivers System shall generally comprise that area measured within one-quarter mile from the ordinary high water mark on each side of the river. In the case of any designated river, prior to publication of boundaries pursuant to section 3(b) of this Act, the boundaries also shall comprise the same area. This subsection shall not be construed to limit the possible scope of the study report to address areas which may lie more than one-quarter mile from the ordinary high water mark on each side of the river.

Study rivers.

Section 5.

(a) The following rivers are hereby designated for potential addition to the national wild and scenic rivers system:

(1) **Allegheny, Pennsylvania.** – The segment from its mouth to the town of East Brady, Pennsylvania.

(2) **Bruneau, Idaho.** – The entire main stem.

(3) **Buffalo, Tennessee.** – The entire river.

(4) **Chattooga, North Carolina, South Carolina, and Georgia.** – The entire river.

(5) **Clarion, Pennsylvania.** – The segment between Ridgway and its confluence with the Allegheny River.

(6) **Delaware, Pennsylvania and New York, et al.**

Study periods.

(b)

Additional study requirements.

(c) The study of any of said rivers shall be pursued in as close cooperation with appropriate agencies of the affected State and its political subdivisions as possible, shall be carried on jointly with such agencies if request for such joint study is made by the State, and shall include a determination of the degree to which the State or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the national wild and scenic rivers system.

Federal agency consideration of wild and scenic values.

(d)(1) In all planning for the use and development of water and related land resources, consideration shall be given by all Federal agencies involved to potential national wild, scenic and recreational river areas, and all river basin and project plan reports submitted to the Congress shall consider and discuss any such potentials. The Secretary of the Interior and the Secretary of Agriculture shall make specific studies and investigations to determine which additional wild, scenic and recreational river areas within the United States shall be evaluated in planning reports by all Federal agencies as potential alternative uses of the water and related land resources involved.

(2) The Congress finds that the Secretary of the Interior, in preparing the Nationwide Rivers Inventory as a specific study for possible additions to the national wild and scenic rivers system, identified the Upper Klamath River from below the John Boyle Dam to the Oregon-California State line. The Secretary, acting through the Bureau of Land

Management, is authorized under this subsection to complete a study of the eligibility and suitability of such segment for potential addition to the national wild and scenic rivers system. Such study shall be completed, and a report containing the results of the study shall be submitted to Congress by April 1, 1990. Nothing in this paragraph shall affect the authority or responsibilities of any other Federal agency with respect to activities or action on this segment and its immediate environment.

Acquisition procedures and limitations.

Section 6.

(a)(1) The Secretary of the Interior and the Secretary of Agriculture are each authorized to acquire lands and interests in land within the authorized boundaries of any component of the national wild and scenic rivers system designated in section 3 of this Act, or hereafter designated for inclusion in the system by Act of Congress, which is administered by him, but he shall not acquire fee title to an average of more than 100 acres per mile on both sides of the river. Lands owned by a State may be acquired only by donation or by exchange in accordance with the subsection (d) of this section. Lands owned by an Indian tribe or a political subdivision of a State may not be acquired without the consent of the appropriate governing body thereof as long as the Indian tribe or political subdivision is following a plan for management and protection of the lands which the Secretary finds protects the land and assures its use for purposes consistent with this Act. Money appropriated for Federal purposes from the land and water conservation fund shall, without prejudice to the use of appropriations from other sources, be available to Federal departments and agencies for the acquisition of property for the purposes of this Act.

Federal agency consideration of wild and scenic values.

(2) When a tract of land lies partially within and partially outside the boundaries of a component of the national wild and scenic rivers system, the appropriate Secretary may, with the consent of the landowners for the portion outside the boundaries, acquire the entire tract. The land or interest therein so acquired outside the boundaries shall not be counted against the average one-hundred-acre-per-mile fee title limitation of subsection (a)(1). The lands or interests therein outside such boundaries, shall be disposed of, consistent with existing authorities of law, by sale, lease, or exchange.

(b) If 50 per centum or more of the entire acreage outside the ordinary high water mark on both sides of the river within a federally administered wild, scenic or recreational river area is owned in fee title by the United States, by the State or States within which it lies, or by political subdivisions of those States, neither Secretary shall acquire fee title to any lands by condemnation under authority of this Act. Nothing contained in this section, however, shall preclude the use of condemnation when necessary to clear title or to acquire scenic easements or such other easements as are reasonably necessary to give the public access to the river and to permit its members to traverse the length of the area or of selected segments thereof.

(c) Neither the Secretary of the Interior nor the Secretary of Agriculture may acquire lands by condemnation, for the purpose of including such lands in any national wild, scenic or recreational river area, if such lands are located within any incorporated city, village or borough which has in force and applicable to such lands a duly adopted, valid zoning ordinance that conforms with the purposes of this Act. In order to carry out the provisions of this subsection the appropriate Secretary shall issue guidelines, specifying standards for local zoning ordinances, which are consistent with the purposes of this Act. The standards specified in such guidelines shall have the object of (A) prohibiting new commercial or industrial uses other than commercial or industrial uses which are consistent with the purposes of this Act, and (B) the protection of the bank lands by means of acreage, frontage, and setback requirements on development.

(d) The appropriate Secretary is authorized to accept title to non-Federal property within the authorized boundaries of any federally administered component of the national wild and scenic rivers system designated in section 3 of this Act or hereafter designated for inclusion in the system by Act of Congress and, in exchange therefor, convey to the grantor any federally owned property which is under his jurisdiction within the State in which the component

lies and which he classifies as suitable for exchange or other disposal. The values of the properties so exchanged either shall be approximately equal or, if they are not approximately equal, shall be equalized by the payment of cash to the grantor or to the Secretary as the circumstances require.

(e) The head of any Federal department or agency having administrative jurisdiction over any lands or interests in land within the authorized boundaries of any federally administered component of the national wild and scenic rivers system designated in section 3 of this Act or hereafter designated for inclusion in the system by Act of Congress is authorized to transfer to the appropriate Secretary jurisdiction over such lands for administration in accordance with the provisions of this Act. Lands acquired by or transferred to the Secretary of Agriculture for the purposes of this Act within or adjacent to a national forest shall upon such acquisition or transfer become national forest lands.

(f) The appropriate Secretary is authorized to accept donations of lands and interests in land, funds, and other property for use in connection with his administration of the national wild and scenic rivers system.

(g)(1) Any owner or owners (hereinafter in this subsection referred to as “owner”) of improved property on the date of its acquisition, may retain for themselves and their successors or assigns a right of use and occupancy of the improved property for noncommercial residential purposes for a definite term not to exceed twenty-five years, or in lieu thereof, for a term ending at the death of the owner, or the death of his spouse, or the death of either or both of them. The owner shall elect the term to be reserved. The appropriate Secretary shall pay to the owner the fair market value of the property on the date of such acquisition less the fair market value on such a date of the right retained by the owner.

(2) A right of use and occupancy retained pursuant to this subsection shall be subject to termination whenever the appropriate Secretary is given reasonable cause to find that such use and occupancy is being exercised in a manner which conflicts with the purposes of this Act. In the event of such a finding, the Secretary shall tender to the holder of that right an amount equal to the fair market value of that portion of the right which remains unexpired on the date of termination. Such right of use or occupancy shall terminate by operation of law upon tender of the fair market price.

(3) The term “improved property”, as used in this Act, means a detached, one-family dwelling (hereinafter referred to as “dwelling”), the construction of which was begun before January 1, 1967, (except where a different date is specifically provided by law with respect to any particular river), together with so much of the land on which the dwelling is situated, the said land being in the same ownership as the dwelling, as the appropriate Secretary shall designate to be reasonably necessary for the enjoyment of the dwelling for the sole purpose of noncommercial residential use, together with any structures accessory to the dwelling which are situated on the land so designated.

Restrictions on hydro and water resource development projects on designated rivers.

Section 7.

(a) The Federal Power Commission [FERC] shall not license the construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act (41 Stat. 1063), as amended (16 U.S.C. 791a et seq.), on or directly affecting any river which is designated in section 3 of this Act as a component of the national wild and scenic rivers system or which is hereafter designated for inclusion in that system, and no department or agency of the United States shall assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river was established, as determined by the Secretary charged with its administration. Nothing contained in the foregoing sentence, however, shall preclude licensing of, or assistance to, developments below or above a wild, scenic or recreational river area or on any stream tributary thereto which will not invade the area or unreasonably diminish the scenic, recreational, and fish and wildlife values present in the area on the date of designation of a river as a component of the national wild and scenic rivers system. No department or agency of the United States shall recommend authorization of any water resources project that would have a direct and adverse effect on the values for which such river was established, as determined by the Secretary charged with its administration, or request

appropriations to begin construction of any such project, whether heretofore or hereafter authorized, without advising the Secretary of the Interior or the Secretary of Agriculture, as the case may be, in writing of its intention so to do at least sixty days in advance, and without specifically reporting to the Congress in writing at the time it makes its recommendation or request in what respect construction of such project would be in conflict with the purposes of this Act and would affect the component and the values to be protected by it under this Act. Any license heretofore or hereafter issued by the Federal Power Commission [FERC] affecting the New River of North Carolina shall continue to be effective only for that portion of the river which is not included in the national wild and scenic rivers system pursuant to section 2 of this Act and no project or undertaking so licensed shall be permitted to invade, inundate or otherwise adversely affect such river segment.

Restrictions on hydro and water resource development projects on study rivers.

(b) The Federal Power Commission [FERC] shall not license the construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act, as amended, on or directly affecting any river which is listed in section 5, subsection (a), of this Act, and no department or agency of the United States shall assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river might be designated, as determined by the Secretary responsible for its study or approval – (i) during the ten-year period following enactment of this Act [October 2, 1968] or for a three complete fiscal year period following any Act of Congress designating any river for potential addition to the national wild and scenic rivers system, whichever is later, unless, prior to the expiration of the relevant period, the Secretary of the Interior and where national forest lands are involved, the Secretary of Agriculture, on the basis of study, determine that such river should not be included in the national wild and scenic rivers system and notify the Committees on Interior and Insular Affairs of the United States Congress, in writing, including a copy of the study upon which the determination was made, at least one hundred and eighty days while Congress is in session prior to publishing notice to that effect in the *Federal Register*: Provided, That if any Act designating any river or rivers for potential addition to the national wild and scenic rivers system provides a period for the study or studies which exceeds such three complete fiscal year period the period provided for in such Act shall be substituted for the three complete fiscal year period in the provisions of this clause (i); and (ii) during such interim period from the date a report is due and the time a report is actually submitted to the Congress; and (iii) during such additional period thereafter as, in the case of any river the report for which is submitted to the President and the Congress for inclusion in the national wild and scenic rivers system, is necessary for congressional consideration thereof or, in the case of any river recommended to the Secretary of the Interior for inclusion in the national wild and scenic rivers system under section 2(a)(ii) of this Act, is necessary for the Secretary's consideration thereof, which additional period, however, shall not exceed three years in the first case and one year in the second.

Nothing contained in the foregoing sentence, however, shall preclude licensing of, or assistance to, developments below or above a potential wild, scenic or recreational river area or on any stream tributary thereto which will not invade the area or diminish the scenic, recreational, and fish and wildlife values present in the potential wild, scenic or recreational river area on the date of designation of a river for study as provided in section 5 of this Act. No department or agency of the United States shall, during the periods hereinbefore specified, recommend authorization of any water resources project on any such river or request appropriations to begin construction of any such project, whether heretofore or hereafter authorized, without advising the Secretary of the Interior and, where national forest lands are involved, the Secretary of Agriculture in writing of its intention so to do at least sixty days in advance of doing so and without specifically reporting to the Congress in writing at the time it makes its recommendation or request in what respect construction of such project would be in conflict with the purposes of this Act and would affect the component and the values to be protected by it under this Act.

(c) The Federal Power Commission [FERC] and all other Federal agencies shall, promptly upon enactment of this Act, inform the Secretary of the Interior and, where national forest lands are involved, the Secretary of Agriculture, of any proceedings, studies, or other activities within their jurisdiction which are now in progress and which affect or may affect any of the rivers specified in section 5, subsection (a), of this Act. They shall likewise inform him of any such proceedings, studies, or other activities which are hereafter commenced or resumed before they are commenced or resumed.

Grants under Land and Water Conservation Fund Act of 1965.

(d) Nothing in this section with respect to the making of a loan or grant shall apply to grants made under the Land and Water Conservation Fund Act of 1965 (78 Stat. 897; 16 U.S.C. 460l-5 et seq.).

Limitations to entry on public lands.

(a) Designated rivers.

Section 8.

(a) All public lands within the authorized boundaries of any component of the national wild and scenic rivers system which is designated in section 3 of this Act or which is hereafter designated for inclusion in that system are hereby withdrawn from entry, sale, or other disposition under the public land laws of the United States. This subsection shall not be construed to limit the authorities granted in section 6(d) or section 14A of this Act.

(b) Study rivers.

(b) All public lands which constitute the bed or bank, or are within one-quarter mile of the bank, of any river which is listed in section 5, subsection (a), of this Act are hereby withdrawn from entry, sale, or other disposition under the public land laws of the United States for the periods specified in section 7, subsection (b), of this Act.

Notwithstanding the foregoing provisions of this subsection or any other provision of this Act, subject only to valid existing rights, including valid Native selection rights under the Alaska Native Claims Settlement Act, all public lands which constitute the bed or bank, or are within an area extending two miles from the bank of the river channel on both sides of the river segments referred to in paragraphs (77) through (88) of section 5(a) are hereby withdrawn from entry, sale, State selection or other disposition under the public land laws of the United States for the periods specified in section 7(b) of this Act.

Limitations on mineral entry and development on Public Lands; designated rivers.

Section 9.

(a) Nothing in this Act shall affect the applicability of the United States mining and mineral leasing laws within components of the national wild and scenic rivers system except that – (i) all prospecting, mining operations, and other activities on mining claims which, in the case of a component of the system designated in section 3 of this Act, have not heretofore been perfected or which, in the case of a component hereafter designated pursuant to this Act or any other Act of Congress, are not perfected before its inclusion in the system and all mining operations and other activities under a mineral lease, license, or permit issued or renewed after inclusion of a component in the system shall be subject to such regulations as the Secretary of the Interior or, in the case of national forest lands, the Secretary of Agriculture may prescribe to effectuate the purposes of this Act; (ii) subject to valid existing rights, the perfection of, or issuance of a patent to, any mining claim affecting lands within the system shall confer or convey a right or title only to the mineral deposits and such rights only to the use of the surface and the surface resources as are reasonably required to carrying on prospecting or mining operations and are consistent with such regulations as may be prescribed by the Secretary of the Interior, or in the case of national forest lands, by the Secretary of Agriculture; and (iii) subject to valid existing rights, the minerals in Federal lands which are part of the system and constitute the bed or bank or are situated within one-quarter mile of the bank of any river designated a wild river under this Act or any subsequent Act are hereby withdrawn from all forms of appropriation under the mining laws and from operation of the mineral leasing laws including, in both cases, amendments thereto. Regulations issued pursuant to paragraphs (i) and (ii) of this subsection shall, among other things, provide safeguards against pollution of the river involved and unnecessary impairment of the scenery within the component in question.

Study rivers.

(b) The minerals in any Federal lands which constitute the bed or bank or are situated within one-quarter mile of the bank of any river which is listed in section 5, subsection (a) of this Act are hereby withdrawn from all forms of

appropriation under the mining laws during the periods specified in section 7, subsection (b) of this Act. Nothing contained in this subsection shall be construed to forbid prospecting or the issuance of leases, licenses, and permits under the mineral leasing laws subject to such conditions as the Secretary of the Interior and, in the case of national forest lands, the Secretary of Agriculture find appropriate to safeguard the area in the event it is subsequently included in the system. Notwithstanding the foregoing provisions of this subsection or any other provision of this Act, all public lands which constitute the bed or bank, or are within an area extending two miles from the bank of the river channel on both sides of the river segments referred to in paragraphs (77) through (88) of section 5(a), are hereby withdrawn, subject to valid existing rights, from all forms of appropriation under the mining laws and from operation of the mineral leasing laws including, in both cases, amendments thereto, during the periods specified in section 7(b) of this Act.

Management direction.

Section 10.

(a) Each component of the national wild and scenic rivers system shall be administered in such manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration primary emphasis shall be given to protecting its aesthetic, scenic, historic, archaeologic, and scientific features. Management plans for any such component may establish varying degrees of intensity for its protection and development, based on the special attributes of the area.

(b) Any portion of a component of the national wild and scenic rivers system that is within the national wilderness preservation system, as established by or pursuant to the Act of September 3, 1964 (78 Stat. 890; 16 U.S.C., ch. 23),³⁹ shall be subject to the provisions of both the Wilderness Act and this Act with respect to preservation of such river and its immediate environment, and in case of conflict between the provisions of these Acts the more restrictive provisions shall apply.

(c) Any component of the national wild and scenic rivers system that is administered by the Secretary of the Interior through the National Park Service shall become a part of the national park system, and any such component that is administered by the Secretary through the Fish and Wildlife Service shall become a part of the national wildlife refuge system. The lands involved shall be subject to the provisions of this Act and the Acts under which the national park system or national wildlife refuge system, as the case may be, is administered, and in case of conflict between the provisions of these Acts, the more restrictive provisions shall apply. The Secretary of the Interior, in his administration of any component of the national wild and scenic rivers system, may utilize such general statutory authorities relating to areas of the national park system and such general statutory authorities otherwise available to him for recreation and preservation purposes and for the conservation and management of natural resources as he deems appropriate to carry out the purposes of this Act.

(d) The Secretary of Agriculture, in his administration of any component of the national wild and scenic rivers system area, may utilize the general statutory authorities relating to the national forests in such manner as he deems appropriate to carry out the purposes of this Act.

(e) The Federal agency charged with the administration of any component of the national wild and scenic rivers system may enter into written cooperative agreements with the Governor of a State, the head of any State agency, or the appropriate official of a political subdivision of a State for State or local governmental participation in the administration of the component. The States and their political subdivisions shall be encouraged to cooperate in the planning and administration of components of the system which include or adjoin State- or county-owned lands.

Federal assistance to others; cooperation; use of volunteers.

Section 11.

(a) The Secretary of the Interior shall encourage and assist the States to consider, in formulating and carrying out their comprehensive statewide outdoor recreation plans and proposals for financing assistance for State and local projects submitted pursuant to the Land and Water Conservation Fund Act of 1965 (78 Stat. 897), needs and opportunities for establishing State and local wild, scenic and recreational river areas.

(b)(1) The Secretary of the Interior, the Secretary of Agriculture, or the head of any other Federal agency, shall assist, advise, and cooperate with States or their political subdivisions, landowners, private organizations, or individuals to plan, protect, and manage river resources. Such assistance, advice and cooperation may be through written agreements or otherwise. This authority applies within or outside a federally administered area and applies to rivers which are components of the national wild and scenic rivers system and to other rivers. Any agreement under this subsection may include provisions for limited financial or other assistance to encourage participation in the acquisition, protection, and management of river resources.

(2) Wherever appropriate in furtherance of this Act, the Secretary of Agriculture and the Secretary of the Interior are authorized and encouraged to utilize the following:

(A) For activities on federally owned land, the Volunteers in the Parks Act of 1969 (16 U.S.C. 18g-j) and the Volunteers in the Forest Act of 1972 (16 U.S.C. 558a-558d).

(B) For activities on all other lands, section 6 of the Land and Water Conservation Fund Act of 1965 (relating to the development of statewide comprehensive outdoor recreation plans).

(3) For purposes of this subsection, the appropriate Secretary or the head of any Federal agency may utilize and make available Federal facilities, equipment, tools and technical assistance to volunteers and volunteer organizations, subject to such limitations and restrictions as the appropriate Secretary or the head of any Federal agency deems necessary or desirable.

(4) No permit or other authorization provided for under provision of any other Federal law shall be conditioned on the existence of any agreement provided for in this section.

Management policies

Section 12.

(a) The Secretary of the Interior, the Secretary of Agriculture, and the head of any other Federal department or agency having jurisdiction over any lands which include, border upon, or are adjacent to, any river included within the National Wild and Scenic Rivers System or under consideration for such inclusion, in accordance with section 2(a)(ii), 3(a), or 5(a), shall take such action respecting management policies, regulations, contracts, plans, affecting such lands, following November 10, 1978, as may be necessary to protect such rivers in accordance with the purposes of this Act. Such Secretary or other department or agency head shall, where appropriate, enter into written cooperative agreements with the appropriate State or local official for the planning, administration, and management of Federal lands which are within the boundaries of any rivers for which approval has been granted under section 2(a)(ii). Particular attention shall be given to scheduled timber harvesting, road construction, and similar activities which might be contrary to the purposes of this Act.

(b) Nothing in this section shall be construed to abrogate any existing rights, privileges, or contracts affecting Federal lands held by any private party without the consent of said party.

(c) The head of any agency administering a component of the national wild and scenic rivers system shall cooperate with the Administrator, Environmental Protection Agency and with the appropriate State water pollution control agencies for the purpose of eliminating or diminishing the pollution of waters of the river.

Reservation of State and Federal jurisdiction and responsibilities; access to and across wild and scenic rivers.

Section 13.

(a) Nothing in this Act shall affect the jurisdiction or responsibilities of the States with respect to fish and wildlife. Hunting and fishing shall be permitted on lands and waters administered as parts of the system under applicable State and Federal laws and regulations unless, in the case of hunting, those lands or waters are within a national park or monument. The administering Secretary may, however, designate zones where, and establish periods when, no hunting is permitted for reasons of public safety, administration, or public use and enjoyment and shall issue appropriate regulations after consultation with the wildlife agency of the State or States affected.

(b) The jurisdiction of the States and the United States over waters of any stream included in the national wild, scenic or recreational river area shall be determined by established principles of law. Under the provisions of this Act, any taking by the United States of a water right which is vested under either State or Federal law at the time such river is included in the national wild and scenic rivers system shall entitle the owner thereof to just compensation. Nothing in this Act shall constitute an express or implied claim or denial on the part of the Federal Government as to exemption from State water laws.

(c) Designation of any stream or portion thereof as a national wild, scenic or recreational river area shall not be construed as a reservation of the waters of such streams for purposes other than those specified in this Act, or in quantities greater than necessary to accomplish these purposes.

(d) The jurisdiction of the States over waters of any stream included in a national wild, scenic or recreational river area shall be unaffected by this Act to the extent that such jurisdiction may be exercised without impairing the purposes of this Act or its administration.

(e) Nothing contained in this Act shall be construed to alter, amend, repeal, interpret, modify, or be in conflict with any interstate compact made by any States which contain any portion of the national wild and scenic rivers system.

(f) Nothing in this Act shall affect existing rights of any State, including the right of access, with respect to the beds of navigable streams, tributaries, or rivers (or segments thereof) located in a national wild, scenic or recreational river area.

(g) The Secretary of the Interior or the Secretary of Agriculture, as the case may be, may grant easements and rights-of-way upon, over, under, across, or through any component of the national wild and scenic rivers system in accordance with the laws applicable to the national park system and the national forest system, respectively: *Provided*, That any conditions precedent to granting such easements and rights-of-way shall be related to the policy and purpose of this Act.

Land donations.

Section 14.

The claim and allowance of the value of an easement as a charitable contribution under section 170 of title 26, United States Code, or as a gift under section 2522 of said title shall constitute an agreement by the donor on behalf of himself, his heirs, and assigns that, if the terms of the instrument creating the easement are violated, the donee or the United States may acquire the servient estate at its fair market value as of the time the easement was donated minus the value of the easement claimed and allowed as a charitable contribution or gift.

Lease of Federal lands.

Section 14A.

(a) Where appropriate in the discretion of the Secretary, he may lease federally owned land (or any interest therein) which is within the boundaries of any component of the national wild and scenic rivers system and which has been

acquired by the Secretary under this Act. Such lease shall be subject to such restrictive covenants as may be necessary to carry out the purposes of this Act.

(b) Any land to be leased by the Secretary under this section shall be offered first for such lease to the person who owned such land immediately before its acquisition by the United States.

Exceptions for Alaska.

Section 15. Notwithstanding any other provision to the contrary in sections 3 and 9 of this Act, with respect to components of the national wild and scenic rivers system in Alaska designated by paragraphs (38) through (50) of section 3(a) of this Act – (1) the boundary of each such river shall include an average of not more than six hundred and forty acres per mile on both sides of the river. Such boundary shall not include any lands owned by the State or a political subdivision of the State nor shall such boundary extend around any private lands adjoining the river in such manner as to surround or effectively surround such private lands; and (2) the withdrawal made by paragraph (iii) of section 9(a) shall apply to the minerals in Federal lands which constitute the bed or bank or are situated within one-half mile of the bank of any river designated a wild river by the Alaska National Interest Lands Conservation Act.

Definitions.

Section 16.

As used in this Act, the term –

(a) “River” means a flowing body of water or estuary or a section, portion, or tributary thereof, including rivers, streams, creeks, runs, kills, rills, and small lakes.

(b) “Free-flowing”, as applied to any river or section of a river, means existing or flowing in natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway. The existence, however, of low dams, diversion works, and other minor structures at the time any river is proposed for inclusion in the national wild and scenic rivers system shall not automatically bar its consideration for such inclusion: *Provided*, That this shall not be construed to authorize, intend, or encourage future construction of such structures within components of the national wild and scenic rivers system.

(c) “Scenic easement” means the right to control the use of land (including the air space above such land) within the authorized boundaries of a component of the wild and scenic rivers system, for the purpose of protecting the natural qualities of a designated wild, scenic or recreational river area, but such control shall not affect, without the owner’s consent, any regular use exercised prior to the acquisition of the easement. For any designated wild and scenic river, the appropriate Secretary shall treat the acquisition of fee title with the reservation of regular existing uses to the owner as a scenic easement for purposes of this Act. Such an acquisition shall not constitute fee title ownership for purposes of section 6(b).

Authorization of appropriations for land acquisition.

Section 17.

There are hereby authorized to be appropriated, including such sums as have heretofore been appropriated, the following amounts for land acquisition for each of the rivers described in section 3(a) of this Act:

- Clearwater, Middle Fork, Idaho, \$2,909,800;
- Eleven Point, Missouri, \$10,407,000;
- Feather, Middle Fork, California, \$3,935,700;
- Rio Grande, New Mexico, \$253,000;
- Rogue, Oregon, \$15,147,000

- St. Croix, Minnesota and Wisconsin, \$21,769,000;
- Salmon, Middle Fork Idaho, \$1,837,000; and
- Wolf Wisconsin, \$142,150.

Footnotes

- ¹ The Wild and Scenic Rivers Act (16 U.S.C. 1271-1287) as set forth herein consists of Public Law 90-542 (October 2, 1968) and amendments thereto.
- ^{1a} Public Law 102-220 contains additional provisions.
- ² Public Law 92-560, which inserted this paragraph, contains additional provisions.
- ³ Public Law 94-199 added paragraphs 11 and 12. Public Law 94-199 also contains several related provisions.
- ⁴ For additional provisions of law concerning the Missouri River segment, see Public Law 94-486 (Sec. 202 and Sec. 203).
- ⁵ The National Parks and Recreation Act of 1978, Public Law 95-625, section 704(b)-(j).
- ⁶ Section 401(p) of the Act of October 12, 1979 amended section 704(a) of the Act of November 10, 1978 which added this section. That amendment changed the reference here to "section 704(c)."
- ⁷ Section 9(b) of the Central Idaho Wilderness Act of 1980 (PL 96-312) contains the following provision: (b) That segment of the main Salmon River designated as a component of the Wild and Scenic Rivers System by this Act, which lies within the River of No Return Wilderness or the Gospel-Hump Wilderness designated by Public Law 95-237, shall be managed under the provisions of the Wild and Scenic Rivers Act, as amended, and the regulations promulgated pursuant thereto, notwithstanding section 10(b) of the Wild and Scenic Rivers Act or any provisions of the Wilderness Act to the contrary.
- ⁸ Public Law 96-487 which designated rivers in Alaska contains many provisions applying only to rivers in that State.
- ⁹ Title I of Public Law 99-590 contains additional provisions concerning the Cache la Poudre.
- ¹⁰ Designated as paragraph (57) in original law.
- ¹¹ Designated as paragraph (58) in original law.
- ¹² Section 13 of Public Law 99-663, contains additional provisions affecting tributaries.
- ¹³ Section 3 of Public Law 102-432 which added (62)(B)(i) contains additional provisions.
- ¹⁴ Title I of Public Law 100-557 which designated rivers (68) through (107) contains additional provisions.
- ¹⁵ Public Law 100-633, which inserted this paragraph, contains additional provisions.
- ¹⁶ River #108, Rio Chama, is the last river which has been numbered in section 3(a). The remaining numbers in this section have been assigned in chronological order according to designation and probably will be confirmed by a technical amendment to the Act.
- ¹⁷ Public Law 102-50 which designated this river contains additional provisions.
- ¹⁸ Public Law 102-249 which designated rivers 119 through 132 contains additional provisions.
- ¹⁹ Public Law 102-271 which designated this river contains additional provisions.
- ²⁰ Public Law 102-275 which designated rivers 134 through 141 contains an additional provision regarding a State-administered component.
- ²¹ Public Law 103-162 which designated this river contains additional provisions.
- ²² Public Law 103-170 which designated this river contains an additional provision.
- ²³ Public Law 103-242 which designated this river contains additional provisions.
- ²⁴ Public Law 103-313 which designated this river contains additional provisions.
- ²⁵ Title II, Section 202 of Public Law 99-590 contains additional provisions concerning the Farmington River.
- ²⁶ Public Law 101-357 which authorized this study contains an additional provision regarding funding.
- ²⁷ Should be (108). Congress will probably pass a technical amendment to correct the numbering sequence.
- ²⁸ From this point on, except for White Clay Creek, the authorizing legislation did not provide numbers. Numbers 109-135 have been assigned chronologically to assist the user. Congress probably will pass a technical amendment providing numbers.
- ²⁹ Public Law 101-628 which authorized this study contains additional provisions.
- ³⁰ Public Law 102-50 which authorized this study contains additional provisions.
- ³¹ Should be 113.
- ³² Section 5 of Public Law 102-249 which authorized studies 114 through 124 contains special study provisions.
- ³³ Section 7(b) of Public Law 102-301 which authorized studies 127 through 131 contains additional study instructions.
- ³⁴ Probably should refer to Section 1203.
- ³⁵ This should be (10). Future technical amendments probably will be made to establish correct numbering sequence.
- ³⁶ Should be (12)(A).
- ³⁷ Should be (13).
- ³⁸ Should be (14).
- ³⁹ So in original law. Refers to "the Wilderness Act."

Laws Amending or Related to the Wild and Scenic Rivers Act.

- 92-560
- 93-621
- 94-199
- 94-486
- 95-87
- 95-625
- 96-87
- 96-312
- 96-487
- 99-590
- 99-663
- 100-33
- 100-150
- 100-412
- 100-552
- 100-534
- 100-557
- 100-605
- 100-633
- 100-677
- 101-175
- 101-357
- 101-612
- 101-628
- 102-50
- 102-220
- 102-249
- 102-271
- 102-275
- 102-301
- 102-432
- 102-460
- 102-536
- 103-162
- 103-170
- 103-242
- 103-313

Index

Symbols

1972 Comprehensive River Management Plan Ch.1; 3, 5, 7 Ch.3; 5, 44 Ch.4; 4 Ch.5; 24, 25, 51, 54, 57, 60

1978 Activity Plan Ch.1; 3, 4, 7 Ch.2; 7 Ch.5; 51, 58

A

Access Ch.1; 8, 12, 15, 16 Ch.2; 3-8, 14-16, 20-23, 29-31, 37, 38, 44-49 Ch.3; 4, 14, 24, 31, 41-46, 54, 56 Ch.4; 6, 8-10, 13-19, 29, 34, 36, 39-49, 55-59, 65-69, 76, 79-86 Ch.5; 14, 15, 48, 53, 56-58, 63

Aquatic Conservation Strategy Ch.1; 8 Ch.4; 14 Ch.5; 32

B

Bald Eagle Ch.3; 22, 23 Ch.4; 25, 26, 29-31 Ch.5; 43, 44

C

Camping Ch.1; 15 Ch.2; 6, 7, 14, 21, 29-31, 37, 45, 46 Ch.3; 5, 9, 14, 33, 39-44 Ch.4; 6, 8, 9, 11-19, 24, 25, 31, 34, 39, 50-53, 55-59, 69, 71, 79, 81, 84, 85 Ch.5; 26, 28, 39, 55, 57, 64

Clean Water Act Ch.1; 10 Ch.3; 3, 11, 12 Ch.4; 12 Ch.5; 31, 55

Coho Salmon Ch.3; 18-21 Ch.4; 20 Ch.5; 42, 43

Commercial Motorized Angling Ch.1; 14 Ch.2; 10, 16-18, 23, 25, 31, 33, 39-41 Ch.3; 28, 32, 52, 56 Ch.4; 11, 20-23, 31-38, 41-49, 54, 62-64, 66-74, 79, 81, 85, 86 Ch.5; 14, 46, 62, 63

D

Day-Use Ch.1; 15 Ch.2; 3, 4, 6, 7, 15, 22, 30, 37, 38, 46, 48 Ch.3; 9, 40-42, 44, 45 Ch.4; 6, 8, 9, 11-15, 17, 18, 24, 32, 34, 39, 41, 44, 47, 50-55, 59, 64-69, 74, 76-80, 82-85 Ch.5; 15, 23, 54-56, 58, 59, 62, 63

E

Endangered Species Act Ch.1; 5, 11 Ch.3; 17, 20, 22, 24 Ch.5; 43

Erosion Ch.2; 5, 10, 11, 13, 17, 18, 20, 24, 25, 27, 28, 32, 33, 35, 40, 41, 43, 44 Ch.3; 11, 14, 15, 30, 34, 36, 38, 51 Ch.4; 10-12, 15, 18, 19, 35-37, 45, 55, 65-68, 71-74, 80-83 Ch.5; 11, 12, 14, 18, 29-33, 39, 46, 47

F

Fall Chinook Salmon Ch.1; 14 Ch.2; 3, 9, 11, 17, 23-26, 32, 39, 40, 44, 53 Ch.3; 18-21, 46 Ch.4; 5, 20-23, 35-39, 43-47, 55, 64-68, 79, 81-83 Ch.5; 19, 33-42, 47

Firearm Discharge Ch.1; 16 Ch.2; 3, 15, 22, 30, 38, 46 Ch.3; 42 Ch.4; 50-52, 54, 55, 65-68, 72-74

Fisheries Ch.1; 6, 8, 10, 11 Ch.2; 5, 23, 39 Ch.3; 5, 13, 18, 20, 21 Ch.4; 4, 5, 20-23, 87, 88 Ch.5; 11, 12, 14, 23, 24, 32, 34, 36-42, 46

Flood Ch.3; 13-15, 27 Ch.4; 10 Ch.5; 31-33, 40

Flood Plain Ch.3; 10, 13-16, 22 Ch.4; 14, 86 Ch.5; 32

J

Josephine County Parks Ch.1; 3, 8 Ch.2; 3, 9, 39-41, 43, 44, 50 Ch.5; 8, 20, 57, 58, 60, 62

M

Mining Ch.3; 3, 14, 25, 39, 41, 43 Ch.4; 21, 22, 23, 54, 55, 64 Ch.5; 23, 55, 56, 64

Motorized Tour Boat Ch.4; 4, 11, 14 Ch.2; 4, 5, 11, 12, 16, 18, 19, 23, 24, 26, 27, 31, 33, 34, 35, 39, 41, 42, 43, 48-53, Ch.3; 21, 28-31, 33, 35, 37, 39, 40, 46, 48-56 Ch.4; 5, 6, 11, 12, 17, 20-24, 29-39, 41-50, 54-59, 62-73, 76-86, 88 Ch.5; 11, 12, 14, 18, 26, 29, 30, 32-41, 44-51, 55, 61-63, 65

Index

N

Nonmotorized Floating Ch.1; 15 Ch.2; 5, 13, 20, 28, 36, 44 Ch.3; 32, 33 Ch.4; 5, 11-14, 21-23, 30-37, 39-48, 50, 54, 59, 61-69, 71-74, 79-82, 84, 85, 88 Ch.5; 11, 12, 14, 26, 27, 35, 36, 39, 49, 50, 51, 52

O

Off-Highway Vehicle Ch.2; 3, 7 Ch.3; 4, 6, 44 Ch.5; 28, 57

Outstandingly Remarkable Value Ch.1; 3-5, 7, 11, 13, 16 Ch.2; 9, 16, 23, 31, 39, 49, 53 Ch.3; 5 Ch.4; 3-6, 8 Ch.5; 20, 24-27, 36-38, 43, 45-47, 49, 50, 52, 54, 57-60, 64

R

Recreation Opportunities Ch.1; 8, 13 Ch.2; 4, 6, 9, 14, 21, 29, 31, 37, 45, 49, 51, 53 Ch.3; 3, 5, 14, 39, 45, 50 Ch.4; 6, 15, 32, 34, 37, 39, 41, 44, 47, 50-54, 59, 69, 88 Ch.5; 14, 15, 46, 52, 54

Redds Ch.2; 3, 11, 40 Ch.3; 18, 19 Ch.4; 20-22 Ch.5; 34, 36, 38, 40-42, 47, 50

Riparian Area Ch.2; 5 Ch.3; 13-16, 18, 22, 27, 40 Ch.4; 10, 14-17, 23, 24, 29 Ch.5; 32

Riparian-Wetland Area Ch.1; 7, 8 Ch.3; 14

S

Safety Ch.1; 11, 14 Ch.2; 5, 7, 8, 10, 12, 17-19, 20, 24-27, 31-33, 35, 40, 41, 43, 44, 45, 52, 53 Ch.3; 15, 31, 35, 37-39, 45-50 Ch.4; 50, 52, 53, 55-64, 80-83 Ch.5; 11, 12, 14, 19, 24, 27, 39, 45, 49, 50, 53, 54, 61

Season of Use Ch.1; 14, 15 Ch.2; 3, 9-11, 13, 17, 18, 20, 24-26, 28, 32, 33, 35, 36, 40, 41, 44, 45, 49, 51-53 Ch.3; 32 Ch.4; 22, 23, 30-32, 36-39, 42, 44, 46, 62-64, 66, 71-73, 80-82, 85, 88 Ch.5; 38, 39, 47, 50, 65

Sedimentation Ch.3; 12 Ch.4; 10-12 Ch.5; 33, 40

Spawning Ch.1; 14 Ch.2; 3, 9, 11, 17, 23-26, 32, 33, 39-41, 44, 52, 53 Ch.3; 18-21 Ch.4; 5, 20-23, 35-39, 43-47, 55, 64-68, 79, 81-83 Ch.5; 12, 32-42, 47, 50, 65

Steelhead Ch.2; 52, 53 Ch.3; 5, 18-22, 39, 48 Ch.4; 5, 6, 20 Ch.5; 35, 36, 40, 42

U

Use Levels Ch.1; 14, 15 Ch.2; 9, 11, 13, 16-18, 20, 23, 24, 26, 28, 31, 32, 34, 36, 39, 42, 44, 45 Ch.3; 9, 29, 31, 33, 35, 46, Ch.4; 5-9, 13, 15, 30, 32, 33, 35-37, 40, 42, 44-49, 61-64, 72-74, 76, 77, 85 Ch.5; 14, 27, 52, 54

Use Limit Ch.1; 14 Ch.2; 4, 23, 24, 28, 29, 39, 45, 48 Ch.4; 5, 6, 11-14, 21, 23, 30-35, 37, 40-49, 63-66, 68, 69, 70, 73, 74, 77, 78, 81, 83-86 Ch.5; 26, 49, 53, 63

User Fees Ch.1; 15 Ch.2; 4, 5, 6, 9, 13, 14, 16, 21, 23, 29, 31, 36, 37, 39, 45, 44, 57 Ch.4; 32, 34, 35, 40-48, 68-70 Ch.5; 14, 53, 54, 67

V

Visitor Center Ch.2; 4, 7, 8, 16, 23, 31, 39, 47 Ch.3; 9, 39, 45, Ch.4; 60, 61, 79 Ch.5; 14, 19, 45, 55, 58-62, 64, 66

W

Western Pond Turtle Ch.3; 25 Ch.4; 28, 30, 31 Ch.5; 44

Wild and Scenic Rivers Act Ch.1; 4-7, 11-13 Ch.2; 49-51 Ch.3; 5 Ch.4; 3-6 Ch.5; 24, 25, 46, 47, 51, 54, 58

Wildfire

Prevention Ch.3; 9 Ch.4; 9 Ch.5; 28

Suppression Ch.3; 10 Ch.4; 8, 9

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

Medford District Office
3040 Biddle Road
Medford, Oregon 97504

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

PRIORITY MAIL
POSTAGE & FEES PAID
Bureau of Land Management
Permit No. G-76